School Nursing in South Australia
Strategic Directions and Operational Implementations for Transforming Health through School Nursing
2016 International Study Tour

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Summary:

‘School Nursing, a specialized practice of public health nursing, protects and promotes student health, facilitates normal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders that bridge health care and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potentials’. (NASN 2016)

The United States of America (USA), United Kingdom (UK) and Sweden have long established, embedded school nursing models that are recognised worldwide. Massachusetts, for example, has acknowledged the importance of health within educational environments for almost 150 years (PHM 2012). Health inspections were introduced in public schools in the 1890’s and the 1900’s saw the first School Health Law passed by legislature, being the first such Law in the United States of America.

At present, in South Australia (SA) there are approximately 40 school nurses working autonomously, isolated from mainstream health services in approximately 30 Catholic and Independent schools. There is currently no school nursing governance framework to direct practice outcomes, no school nursing foundational structures of education, policy or guidelines nor any school nursing clinical support or lead to drive professional excellence. Despite these vulnerabilities, SA school nurses are currently providing outstanding school nursing services which include: health assessments, care planning, targeted referral, health education, sexual health support, family support, public health networking, nursing care provision for acute and chronic health needs, school liaison and multidisciplinary team involvement.

As a team of four South Australian nurses working with children and young people, this study tour provided us with valuable first-hand insight to assist South Australia to lead our nation in the provision of quality sustainable health care for future generations by acknowledging the health, educational and economic benefits provided by school nurses.

Over the 30 days, we visited 13 cities across the United States of America, United Kingdom and Sweden, attended 25 meetings and visited 14 schools/ universities. The varied itinerary provided diverse opportunities to be informed of embedded school nursing models. This included meeting with school nurses, academic Deans, PhD Professors specialising in school nursing, Chief of Nursing, Executive Nurse Fellow, Executive Directors, Health Departmental Leadership, Clinical Lead Nurses, Allied Service Providers and Chief of Operations. We were fortunate to meet extremely passionate and highly skilled practitioners throughout the trip: each with the same goal of improving the lives for ALL our children and each sharing an enormous generosity of their time and invaluable experience.

Across the cities visited it was consistently evident that schools are uniquely positioned with an opportunity to impact student health, educational outcomes and the wellbeing of the wider community.
Variations were apparent not only within the countries and states, but also at district levels regarding the practical outworking of the school nursing models. This allowed a valuable opportunity, through the learnings of our international colleagues, to review and compare the strengths and weaknesses of these models providing SA with the opportunity of developing a ‘Gold Standard’ of school nursing health care.

Strengths of the models included:

- strong government involvement,
- departmental governance structures,
- defined clinical leadership.

The effectiveness of these collective strengths was evidenced through:

- standards for practice,
- professional accountability,
- credentialing,
- education,
- regulations,
- guidelines,
- policies,
- procedures.

Key implications for a South Australian model would include: Federal and State Government support, Department of Health and Education Governance and Clinical Leadership / Supervision.

Although there were considerable strengths to the international school nursing models (covered in the body of the report), it was evident that each country would significantly benefit from an agreed national approach. This identified a key consideration for South Australia: to develop a state-wide model of school nursing which would provide the South Australian community with consistent, evidence based school nursing excellence.

The term ‘Gold Standard’, recognised throughout the US east coast, described the New Jersey and Massachusetts School Nursing models. The “Gold Standard” status came from a model of excellence which consistently encompassed and actioned the strengths listed above. Evidence of this was found in data analysis, documented outcomes and processes in action.

The study tour’s ‘Gold Standard’ recommendation for South Australian school nursing involves a coordinated school health approach through the establishment of a state-wide School Nursing Health Care Delivery System (Massachusetts DPH 2007). This would establish SA, internationally, as a leader in the field of school nursing.

The investigation strongly indicated that there is significant economic benefit to multiple stakeholders through implementing school nurses in SA.
**Stakeholder benefits would include:**

- improved educational budget: through reduced student absenteeism, increasing classroom contact for teachers to educate and improve academic success of students
- students able to remain at school due to skilled nursing assessment
- improved student attendance resulting from better management of chronic health conditions: e.g. asthma, diabetes, allergies
- students able to be treated for their complaint and returned to class
- teachers have more time to teach: nurses prepare for camps, excursions, communicate wellbeing issues with parents, medical information is disseminated to teachers
- reduce Principal / Senior Leadership load: nurses contribute to Wellbeing Teams, Leadership and Executive teams, WHS committees, Critical Incident management
- professional management of the ever-increasing number of health issues of students with anaphylaxis, food allergies, asthma: reduces teacher time required

**Reduced burden on the health system and improved health of future generations of South Australians:**

- reduced ambulance call outs: ambulance service would achieve improved call-out times not being burdened with non-transportation issues that can be managed by Registered Nurses
- reduced waiting times at General Practice (GP) clinics and hospital Emergency Department (ED) services: therefore not unnecessarily burdening the health system
- improved infectious disease control, reducing influenza, gastroenteritis, childhood diseases
- reduced medication administration errors from untrained staff
- early detection, treatment of acute and chronic conditions and diseases
- early detection through screening i.e.: vision, hearing, scoliosis
- holistic early primary health education: sleep, hygiene, nutrition, physical activity, peer pressure, relationships etc.
- health counselling: body image issues (anorexia, obesity), drug and alcohol education and support, self-harm, sexual health, bullying or harassment, social issues, family issues, improved monitoring/management of suspected child abuse or neglect issues, anxiety or depression support
- ability to provide referrals to medical and allied health professionals
- regular and age-appropriate health education of students, provide them with the means to make healthy life choices with long term benefits in life-long risk and health reduction behaviours
Increased productivity of the workforce and general economy of South Australia:

- parents feel secure that children are cared for by a skilled health professional
- parents need less time off work caring for children and less time off to collect children due to unplanned, unnecessary incidences of minor injury or illness
- staff and student immunisation programs: reduce absenteeism in the workforce and at school

Student benefits include:

- the provision of safe, quality, evidenced based health care by trained nursing professionals whilst students are at school
- improved access to nursing care
- improved relationship between student and health professional
- reduced stigma attached to visiting a nurse therefore students will utilise services
- non-disciplinary nature of school nurse strengthens student relationships
- continuity and confidentiality of care
- early intervention through preventative and primary health education and assessment

Investigating international school nursing models provided valuable first-hand insight to help South Australia lead our nation in the provision of quality sustainable health care for future generations, acknowledging the health, educational and economic benefits provided by school nurses.

The investigation strongly supported the premise that the employment of Registered Nurses into all South Australian schools would provide “patient-centred, efficient, accessible and safe healthcare” (SA Health 2014) to future populations of South Australian children and adolescents.

A school’s population is a microcosm of the health issues occurring within the wider community. School age children have connection with a school community 40 weeks (77%) of a year; therefore school nurse delivered health programs are essential within education and a vital entity in the wider health care delivery system for children and adolescents.
Purpose of the Study Tour and Report

The purpose of the study tour was to further enhance the vision for school nursing in South Australia by enabling the investigation, experience and analysis of key components of the strategic and operational aspects of school nursing and the transferability of this enhanced model of care to SA schools. The knowledge and experience gained will inform and guide current (and future) practice: pioneering an innovative, efficient and effective health care system for future generations of SA children.

No matter where in the world we practise as nurses promoting public health, we face the same adversities, the same problems and the same challenges. It is important for us to stand up for the health of our young people, be their voice and value their thoughts and opinions of how they see their future. The United Nations human rights charter acknowledges (UN 1989) that every child has a right to develop a strong foundation for ongoing health and development throughout childhood into adult life. For all children and young people in schools there needs to be a focus on all their needs including their health, social and emotional needs. This is a multi-factorial problem and services need to be coordinated across health, education and social care to begin to make a difference to our children’s lives.

Given that we want an equitable service for all our children and young people in South Australia, this report is a collaboration of a review on school nursing models completed by all four members of the study tour team.

From the review of each site visited, the report will include the educational requirements for a school nursing service, the role of the school nurse and the skill mix that will be vital to implement the role. Organisational structure and clinical governance have been considered also. This will include School Nursing Clinical Leads who will be responsible for clinical leadership, the development of clinical standards and guidelines and provide clinical supervision. Recommendations on the implementation of the role and the possible options for funding will be discussed along with suggestions on data collection and the use of technology within a school nursing service.

Further detail regarding key findings can be found in the body of this document.
**Background:**

Quality, sustainable health care delivering “the right care by the right professional at the right time and the right place” (SA Health 2014) was the driving force behind this research.

Following direct involvement in a recent Change@SA Project scoping the benefits of nurses in schools, the project recommended “that there is clearly potential for nursing services to be delivered in DECD sites where warranted” (DECD 2015). The SA Health, Transforming Health Document confirmed the need to ensure there is a quality health, affordable, efficient health care service in South Australia (SA Health 2014).

Currently in SA, school nursing models are only utilised in non-government schools: usually offering direct patient care provided by one registered nurse per school.

Strategic directions from SA Health coexist with the very essence of school nursing, being a model where a registered nurse is employed to provide multi-faceted holistic care (SA Health 2014).

The USA, UK and Swedish school nursing models, both government and non-government education sectors, are recognised worldwide. The study tour was designed to enable the investigation of these models to provide valuable first-hand insight, to assist South Australia lead our nation in the provision of quality sustainable health care for future generations; acknowledging the health, educational and economic benefits provided by school nurses.

The study tour was funded from various sources. Liz Rankin was successfully awarded a Premier’s Nursing and Midwifery scholarship to ‘Investigate the Strategic Directions for Transforming Health through School Nursing’. The team had also submitted a scholarship application to ‘Investigate the Operational Implementation for Transforming Health through School Nursing’. With the successful award of part of our planned investigation the team was acutely aware that the worthwhile development of an effective evidence based model of school nursing would also require international research regarding the operational and implementation elements of a School Nursing model.

To enable the remaining two team members to undertake the operation and implementation investigation, thus ensuring all elements of the models were investigated, further funding was achieved with the financial support of the Premier’s Office of SA, the Department of Education, Implox Medical Supplies, Industrial First Aid, Tyndale Christian School, Loreto College, Prince Alfred College and the personal contributions of the study tour team. Our passion to see the successful completion of this investigation enabled all three members to participate: Liz Rankin RN/RM Tyndale Christian School, Petria McCallum RN Loreto College and Anna Thomson RN Prince Alfred College. As part of the Department of Education’s financial support, Denise McDonald, an experienced Clinical Practice Consultant within Child
and Family Health Services (CaFHS), Women’s and Children’s Health Network, was appointed to travel with the team, thus ensuring a more comprehensive and thorough investigation into the elements of a school nursing model of care for South Australia.

This report is a collaboration of the investigation completed by all four members of the Study Tour team.

**The Role of the School Nurse in the USA, UK and Sweden:**

In the United States of America, legislation exists in most states to mandate that each school building must employ a registered nurse. Although the method for the funding of schools in different states is similar, the role of the school nurse in each state may differ. Funding for schools is based on student attendance at school and student immunisation levels. Consequently, schools are audited for records of mandatory immunisation requirements from the Department of Health and a large focus of the school nurse role is the follow up and provision of immunisation clinics at school to ensure as many students as possible are fully immunised. Exemption from immunisation can only be provided in writing from a doctor for a) medical exemption, e.g. immunocompromised, allergy or b) religious grounds. There is no allowance for conscientious objection. New legislation recently introduced in California now excludes the option of religious objection (IEG 2016).

Most of the schools visited in the USA were public schools but the role was similar whether the school nurse was employed at public or private schools. A large component of the school nurse workload cludes performing health screenings. These screenings vary from state to state depending on legislative requirements. The role of the nurse also included the provision of student and staff first aid, acute and chronic health care management, primary health prevention, health promotion and teaching of health education in class through the curriculum. Some school nurses were also involved in teaching staff, students and the community how to do Basic Life Support including the Automated External Defibrillator (AED) training. The school nurse played an important role in public health through sophisticated data collection. This information provides cities, regions, states and the nation with vital trends in population health of school aged children: identifying health needs and formulating strategies to mobilise and implement where both expected and unexpected situations arose, such as the spread of the flu virus H1N1. In some areas it provided the background and ability to respond to increasing health concerns, such as the opioid epidemic and the provision of emergency Naloxone medication to schools.

In the United Kingdom, the *Health and Social Care Act 2012* governs the health care of school-aged children under the public health strategy ‘Healthy Lives, Healthy People’ (DOH UK 2011). The ‘*Healthy Child Programme 5-19*’ (HCP) (DOH UK 2009) is a preventative service that ensures that the health and wellbeing of children, young people and their families are assessed and supported, particularly where additional health needs are identified (Department of Health, Department for Children, Schools and
Families, 2009). The HCP operates in partnership with the Health Visiting model (0-5 years) and endorses the continuity of service delivery and a smooth transition from 0-19 years.

Delivery of evidence based programmes, such as the HCP, form part of the important public health role of school nurses in the UK. They are also expected to deliver health promotion advice, screening and surveillance, such as the National Childhood Measuring Programme (NHS Digital, 2016), provide immunisation, engage in health education programmes and deliver public health interventions to identified priority groups: e.g. teen pregnancy, sexual health, substance misuse prevention and obesity. School nurses play a significant role in safeguarding children and young people who face adversities and work in partnership with local authorities, children’s social care, police, probation, youth offending services and voluntary and community services. The school nurse is a public health nurse who sits outside of the school framework but is a critical friend to the school.

Wendy Nicholson, National Lead Nurse, Children, Young people and Families, Public Health England (PHE), stated during an interview on 17 October 2016:

Public Health England has undergone recent restructuring and we are using evidence and research, basing needs on actual needs not perceived needs. School nursing services are very responsive services, meeting the needs of the child, not the school. Students were surveyed and they told us they wanted a service that was visible, accessible and confidential. This did not equate to finding more school nurses but to exploring the utilisation of technology like messaging, email and Skype in order to increase the accessibility of the school nurse to reach the clientele.

School nurses in the UK provide an online health counselling role and referral role. The school nurse is funded through public health money through the National Health Scheme (NHS) and this provides the opportunity for each student to have access to a school nurse. This access may be through a daily or, sometimes, weekly drop in service with allocated appointment times for a face-to-face service. However, this service does not extend to the provision of around the clock first aid by the school nurse.

In Sweden, the school nurse works within the school on the promotion of student health. In the 1940’s, the Swedish government developed a law that every child would have access to school health (European Agency for Special Needs and Inclusive Education, 2016). Currently in Sweden, all students have access to a school nurse, social worker and psychologist within a school health team. The school health teams are guided by national guidelines under the Education Act 2011. The municipalities have the responsibility for the school health team with the school nurse carrying out the Child Health Programme together with the school physician. School nurses commonly have a consulting room located in the school and work close to the students, but may be spread over a few schools instead of working in a single school. This gives the school nurse the opportunity to monitor and promote health as well as care for
children and young people’s ill health in collaboration with school physicians, parents, teachers and others involved. School health care in Sweden covers all children and young people from the age of 6 years until they are approximately 19-years old and often involves annual health reviews. The role of the school nurse includes health checks, immunisations and health education in classrooms.

**School Nurse Scope of Practice**

School nursing in the USA is considered one of their most rapidly expanding nursing specialties. It has developed from the conservative role of infection control, first aid and health education to the now wider and more complex role of connecting the major areas of a child and adolescent's development: education, health care delivery and public health. The advances in the School Nurse role have been in response to the ever-changing needs affecting family units, health delivery systems and the wider public health. Improved community understanding of the fundamentals of nursing would develop a clearer understanding of how the role of a nurse naturally transforms and expands into the role of a school nurse.

The UK Nursing and Midwifery Council (NMC) Register included school nurses into Part 3 entitled ‘specialist community public health nurse’ (SCPHN) in 2004. Some areas within the UK still use the title ‘school nurse’ however in other parts of the UK the term ‘specialist community public health nurse’ is used. In Scotland, the title ‘public health nurse’ is used by some health board areas, while others use ‘school health advisor’. Today's school nurse is considered a specialist practitioner working across education and health, providing a link between school, home and the community to benefit the health and wellbeing of children and young people (RCN 2012).

In the UK, school nurses lead and deliver Department of Health initiatives such as Getting it right for children, young people and families (DOH UK 2012) and the Healthy Child Programme: 5-19yrs old and they are equipped to work at community, family and individual levels. They are trained and skilled in identifying issues early, determining potential risks, and providing early intervention to prevent issues escalating (DOH UK 2009).

The USA's National Association of School Nurses (NASN 2016) describes school nursing as a ‘pivotal role that bridges health care and education’. They have condensed the role into four main areas: leadership, community/public health, care coordination, and quality improvement.

**Leadership** is evident through policy, program and procedure development and providing a system-level leadership while acting as change agents, promoting education and healthcare reform through evidence based best practice. The school nurse incorporates ethical provisions into all areas of practice while acting as a student advocate, providing skills and education.
that encourage self-empowerment, problem solving, effective communication, and collaboration with others. School nurses promote self-management and develop school safety plans to address bullying, school violence, and the full range of emergency incidents which might occur at school. (NASN 2016)

Community and public health underpin school nursing. This emphasis goes beyond the individual to the wider community health promotion and disease prevention. The school nurse provides primary health care through health education which promotes physical and mental health, informs healthcare decisions, prevents disease, and enhances school performance; secondary health care through screenings, referrals, and follow-up to detect and treat health-related issues in their early stage; tertiary prevention by addressing diagnosed health conditions and concerns. (NASN 2016)

School nurses deliver quality health care and nursing intervention for actual and potential health problems through care coordination while proving for the direct care needs of students including medication administration, routine treatments and procedures. School Nurses represent two significant communities: health and education, and as such become the bridge between the two specialty areas making them an essential member in interdisciplinary teams. (NASN 2016)

Continuous quality improvement is the nursing process in action: assessment, identification of the issue, development of a plan of action, implementation of the plan, and evaluation of the outcome. Data collection is important in the quality improvement: continuous and systematic process that leads to measurable improvements and outcomes. (NASN 2016)

Universally, the role of the school nurse frequently assists in reducing emergency visits to hospitals or General Practice rooms, which often have large waiting times similar to South Australia. By providing these services in school it helps to reduce health-related barriers to learning and allows young people to access services, thereby improving overall outcomes.

The UK Department of Health released a best practice guide ‘Getting it right for children, young people and families’ in which they describe the fundamental role of the school nurse as being able to improve child and youth health and wellbeing through a range of skilled activities and communications at individual, group and community level. The document highlights that school nurses work in a range of educational settings and are equipped to support children with illness and disability, facilitating education and life skills.
Figures 2 and 3 were developed by the UK Department of Health as a service model for school nursing (DOH UK 2012 p.9). It describes a four-tier model with safeguarding through all levels. The four levels represent the continuum of support which children and adolescents receive through school nursing and multidisciplinary services.

**Community**

School nurses have an important public health leadership role in the school and wider community: for example, contributing to health needs assessment, designing services to reach young people wherever they are, providing services in community environments and working with young people and school staff to promote health and wellbeing within the school setting. In particular, school nurses will work with others to increase community participation in promoting and protecting health thus building local capacity to improve health outcomes.

**Universal Services**

School nurses will lead, coordinate and provide services to deliver the Healthy Child Programme for those aged 5–19 years for a population. They will provide universal services for all children and young people as set out in the HCP working with their own team and others including health visitors, general practitioners and schools.

**Universal Plus**

School nurses are a key part of ensuring children, young people and families get extra help and support when they need it. They will offer ‘early help’ (for example, through care packages for children with additional health needs, for emotional and mental health problems and sexual health advice) through providing care and/or by referral or signposting to other services. Early help can prevent problems developing or worsening.

**Universal Partnership Plus**

School nurses will be part of teams providing ongoing additional services for vulnerable children, young people and families requiring longer term support for a range of special needs such as disadvantaged children, young people and families or those with a disability, those with mental health or substance misuse problems and risk taking behaviours. School nursing services also form part of the high intensity multi-agency services for children, young people and families where there are child protection or safeguarding concerns.
Gill Turner, Senior Lecturer and Programme Leader, Specialist Community Public Health Nursing, Liverpool John Moores University, formulated this promotional poster (Turner 2016) (Figure 4) to summarise the role of the School Nurse:

![School Nurse Impact Poster](image)

Figure 4: School Nurse Impact

Eva K. Clausson (2013), in her paper written for the School of Health and Society, Kristianstad University, Sweden, used a diagram based on Urie Bronfenbrenner’s ecological systems of theory to diagramatically describe the role of a school nurse working with the spectrum of health needs of children and youth.

Figure 5: The microsystem is closest to the child and contains structures as family, school staff and mates. At this level the relationships have impact in directions both away from and towards the child. The mesosystem provides the connections and relations between the different microsystems. The exosystem defines the larger social systems in which the child does not function directly but has impact on the micro level structure such as parent’s workplace, school resources and the municipality. The macrosystem level comprises of cultural values, customs and laws influencing the interactions of all other layers. The model describes the school nurse as a collaborator and bridge builder where health promotion of universal, selective and indicated level of both the individual and the group perspective are central. (Clausson 2013)
Sustainability and Law

Sustainability for a specialist area of the nursing profession such as school nursing, requires a framework of key components: strong government involvement, departmental governance, defined clinical leadership and credentialing through further education.

In addition, an essential component to sustainability, identified in all three countries, is the introduction of laws governing school nursing and associated funding.

Under the UN Convention on the Rights of the Child (UN 1989) all children have a clear right to accomplish their developmental potential and to sustain the highest possible standard of health. They also have a right to appropriate health services to facilitate attainment of these goals. Our children’s early experiences are central to shaping long term health improvements.

School nurses were highlighted in a new law in USA, in 2015, by President Obama who signed into law the Every Student Succeeds Act (ESSA) (NASN 2015), just one day after it passed the U.S. Senate. Within ESSA there is a crucial provision that highlights the important work of school nurses.
NASN President Beth Mattey said in response to this Act,

“The inclusion of school nurses in ESSA, paves the way for school nurses as necessary and important members of the team who will lead the changing landscape of healthcare.” (NASN 2015)

Mary Ann Gapinski of Massachusetts, Sharon White of London and Karina Karlsson of Vallentuna all spoke of how law can support and direct practice within the specialised field of school nursing. Each of the four UK governments, for example, are pursuing policies that emphasise the value of support for children and young people. (RCN 2012) Since the 1940’s, Swedish government law required every child to have access to school health. Swedish law now contains directives that all students must have access to a school doctor, school nurse, psychologist and school welfare officer at no cost. (Simon, P 2016) Wisconsin State Legislature, 121.004, (2016) states that schools must ‘Provide for emergency nursing services’. Pennsylvania passed a Joint State Government Commission in 2004 regarding Laws Regulating School Nurses in Pennsylvania and Other States. (JSG Pennsylvania 2004)

The USA, UK and Sweden place high importance to the pursuit of legislation and law to ensure that future governments cannot overturn the essential work a current government achieves in regards to health reforms for 6-19 year old children.

The following figures represent the multi-disciplinary involvement of an effective School Nursing Model:

![Diagram: Massachusetts School Nursing Model (MDPH 2007)]
The new school nursing service model maximises the contribution of school nursing teams at a community, family and an individual level. In doing this, existing and new school nursing services will work closely with families, schools, health visitors, other public health specialists, GPs, specialist services and, where appropriate, social care services.

Figure 7: UK School Nursing Model and School Nursing Team Contributions (DOH UK 2012)

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Figure 8: Swedish Health Care System, Delivery of Care, Organisational System (SHCS 2009)
Health Education Delivery

World Health Organization’s (WHO) Global School Health Initiative was launched in 1995 to endorse health promotion and education activities to improve the health of students, school personnel, families and other members of the community through schools. It remains in place today with a system of Health Promoting Schools, research, data collection and strategic alliances. (WHO 2003) The Global School Health Initiative has implications for school nurses with its emphasis on multidisciplinary health education and appropriate delivery forums. Given the multi service provider status of school nurses, they are efficiently positioned to deliver this primary prevention intervention through both formal and informal health education and health promotion and in a cost effective manner.

The USA has clear guidelines in its standards of practice and framework for school nursing regarding health education. School Nurses are involved in delivering general health awareness sessions for younger years, sexual health sessions for older students plus education regarding: oral health, nutrition, drugs and alcohol, puberty development, body image and mental health. They also teach basic life support, infection control and emergency procedures to staff and the school community. Massachusetts school nurses have a specially developed comprehensive school health education (CHSE) program encompassing curriculum and standards from pre-kindergarten through to the final year of school. School nurses may be employed under the teachers’ award and have received motivational interviewing training. Some school nurses have undertaken further qualifications, such as the Masters in Community Health Education. Teaching sessions take place on a one-to-one basis, in small groups, in classrooms, assemblies and professional development sessions. School nurses also provide health information through school newsletters, web pages and articles.

Both Sweden and Public Health England’s school nurses provide similar programs and delivery. In England, the program is called Personal, Social, Health Education (PHSE). PHSE education, while being a non-statutory component of the curriculum, is recognised as part of the national curriculum. (PHSE 2016)
School nurses are qualified, professional health promotion and education resources. Their ability to deliver evidence based health programs should be encouraged to ensure that young people develop the knowledge, attitudes and skills they need to be healthy adults.

**Departmental Governance Structure**

A critical recommendation for an effective school nursing model is the development of a professional governance structure which would provide the framework for a sustainable school nursing program. Translated into a South Australian model the organisational structure would need to include: Federal and State Government support, Department of Health and Education governance and clinical leadership and supervision.

Consistently throughout the USA, UK and Sweden, although there were variances from city to city and municipality to municipality, the importance of government support, departmental governance and clinical leadership and supervision were priority directives.

Dr. Laura T. Jannone RN, NJ- CSN, FNASN of Monmouth, Dr Erin D. Maughan, RWJF Washington, Anne Sheetz, MPH, RN, NEABC and Mary Ann Gapinski, MSN, RN, NCSN of Boston, Viv Bennett Public Health England Chief Nurse and Eva Claussown RNT, MNSc, Phd Stockholm all recommended the importance of strong government involvement, governance structures and defined clinical leadership. This was evidenced in the consistency of standards for practice, professional accountability, regulations, guidelines, policy and procedures throughout the regions.

Significant conversation surrounded strategic professional structure and governance. Anne Sheetz, MPH, RN, NEABC of Boston discussed her paper 'Developing a Strategic Plan for School Health Services' which outlines an insightful strategic timeline of framework development. The abstract from this report stated: ‘School health service programs underwent rapid changes to meet the health needs of today's students. These needs stem largely from: a) increased number of students with special health care needs attending school, b) increased stress and time pressure on families, c) rapid restructuring of the health care system serving children, and d) recognition that schools provide opportunities to identify students with health risks’. (Sheetz, A 2007) (used by permission)

Anne explained that in the 1990’s the Massachusetts Department of Public Health recognised the unique specialised potential of school nurses and established a leadership framework to develop the school nursing infrastructure to ensure quality care delivery into the local needs of the community. This included: establishment of proactive departmental leadership, setting of standards and the reviewing and revision of statutes and regulations, review and exploration of funding options, development of post graduate education programs, implementation of data systems, provision of essential continuing education,
advocacy established, policy formation, the publication of a school health manual and developing new models of care.

The strategic development of school nursing in the UK shared many alignments to the USA model. Interestingly in contrast, clinical supervision was not imposed in Independent schools in Sweden, which resulted in varied standards of practice.

An objective of the study tour was to investigate an effective, sustainable school nursing model through the development of a professional governance structure. Currently school nurses in South Australia do not have a school nursing professional governance structure with each nurse being responsible to the independent school framework in which they are employed.

SA’s Health Organisational Chart shows evidence of an already established framework which would effectively support a school nursing model of care for our South Australian children and adolescents. Collaboration between the Department of Health and the Department of Education is imperative. Best practice will be achieved by both areas of government providing joint investment.

Key stakeholders identified for a successful School Nursing Program include but are not limited to:

- Parents, students, community members
- Department of Health (SA Health and Agencies)
- Department of Education
- Child and Youth Health Agencies
- Hospitals and allied health service providers (e.g. Occupational Therapy, Speech Therapy, Physiotherapy, Psychology)
- Private and Independent schools
- Universities
- Child and Family Health Service (CaFHS)
- Child and Adolescent Mental Health Service (CAMHS)
- The Australian College of Nursing (ACN)
- The Australian College of Midwives (ACM)
- The Australian Nursing and Midwifery Federation (ANMF)
- The Royal Australasian College of Physicians (RACP)
- Australian Medical Association (AMA)
- Asthma SA, Epilepsy SA, Diabetes SA, Australasian Society of Clinical Immunology and Allergy (ASCIA)

Acknowledging that SA has not yet undertaken a needs analysis for school nursing services, our discussions prompted consideration of a South Australian school nursing practice model. This model
would be significantly enhanced through Federal and State Government support, Department of Health and Education governance and clinical leadership and supervision.

**Working in Partnership**

The Australian's government’s framework, *Protecting Children is Everyone’s Business National Framework For Protecting Australia’s Children 2009–2020* (DSS 2009) outlines that it is everyone’s responsibility to work together to protect Australia’s children and young people. The framework suggests that this should include the provision of therapeutic and support services for families, children and young people at-risk of abuse or neglect.

The USA’s Wellness Centres provide excellent examples of partnership working. The school nurse works within a Wellness Centre and can be accessed by any young person in the local area. It is a free programme focusing on ‘well visits’, new entrant physicals, sick visits, sports physicals, vaccinations and asthma control programmes. The care is provided by a Nurse Practitioner often in collaboration with the County Health Department. Parents can self-refer as well as the local school nurse. The Nurse Practitioner role is in addition to the school nurses. The Nurse Practitioner can prescribe medication along with minor specimen collection. This works well and reduces the unnecessary visits to hospitals or medical practitioners. By providing these services in school it helps to reduce health-related barriers to learning and allows young people to access services. Care givers give consent for their child to attend the Wellness Centre but they do not have to attend with the child. Siting the Wellness Centre in an area of high need, depending on school and community demographics should be considered for improving the health outcomes of not only the school community but for the whole community.

In the UK the Health Visitor (similar to the CaFHS Child and Family Health Nurse role) works with families of children 0-5 years. When the child is 5 years of age a clinical handover occurs with the school nurse. at a meeting where the Health Visitor, School Nurse and staff from the Education Department meet with the family to discuss further care planning.

When young people enter school and are on the Child Protection Register, three monthly case conferences are held with school nurse, education, social worker, family, police and drug and alcohol nurse (when indicated) to review care planning. The Social Worker will coordinate the care of the young person involved.

All students in Sweden are entitled to student health, whether they attend a public or private school. Student health includes the school physician, school nurse, psychologist, and social worker. The school nurse and psychologist work closely together (often in offices next door) and are accessible within the school. Referral’s to attend the school nurse can come from the students themselves, education staff or parents.
The profile of our current SA school nurses should be raised within all agencies working with our vulnerable and children and young people. This was highlighted in the recommendations from The Hon Margaret Nyland’s 2016 Child Protection Systems Royal Commission Report (Nyland, M 2016)

“The need to improve collaboration and cooperation between agencies involved in service delivery to children”

“Caution about information sharing between government departments and other non-government services has created administrative barriers to meeting the needs of children. The current balance assumes that information is confidential except in certain circumstances”

“Notifiers should also be advised of the Agency’s intended response. Knowing whether the Agency will or will not respond to a notification helps a notifier to decide what, if any, action they may need to take”

The employment of child wellbeing practitioners in schools could work collaboratively with a school nursing service and psychologists to address recommendation as per the Royal Commissioners Report (2016).

Together this service could work in a partnership approach to:

“Review and promote Education’s policies regarding school suspension, exclusion and expulsion to ensure that they are used as strategies of last resort for children in care”

Within SA, our child protection department could liaise with school nurses to ensure appropriate and effective follow up of students. Guidelines for this practice already exist for child and family health nurses within CaFHS. Existing documentation on CaFHS’s intranet and the SA Health web site could be utilised for school nurses, e.g. SA Health’s Policy Directive: Compliance is Mandatory - Information Sharing Guidelines for Promoting Safety and Wellbeing: (SA Health 2015)

SA can learn from the UK’s evidence of transitions from a health visiting service to a school nursing programme. One document, from combined key agencies in England, which should be reviewed is Health Visiting and School Nursing Partnership – Pathways for Supporting Health Visitor and School Nurse Interface and Improved Partnership Working (PHE 2016) with particular reference to the Suggested Collaborative Timeline for Services to Support Children and Families from Age Two until Settled into School. This gives information on supporting implementation and pathways for a seamless transition from family health nurses and significant agencies to ensure the best outcomes for families.

**Clinical Supervision**

Clinical supervision is recognised as one of the key components to ensure effective clinical governance.
Currently, for school nurses in South Australia, there are no opportunities for clinical supervision or reflective practice with peers or a clinical lead. Different models of clinical supervision were observed in the USA, UK and Sweden, as outlined below.

In the USA the National Association of School Nurses believe that in order to provide safe and high quality school health services, clinical supervision by a school nurse manager, coordinator or supervisor is necessary. (NASN 2013) This is aligned to the Australian Clinical Supervision Association: ‘Clinical supervision is a formal professional relationship between two or more people in designated roles, which facilitates reflective practice, explores ethical issues, and develops skills’ (ACSA 2016).

Clinical supervision is clinician led and focused according to the clinician’s needs. For school nurses in South Australia it would develop crucial conversations to provide supportive and productive standards of work while also providing non-client contact time for staff to develop an evidence-based approach in their clinical roles.

Benefits of clinical supervision to a school nursing service would include:

- school nurses would feel better supported,
- it will provide a safe space to reflect on practice and identify personal development opportunities,
- it will act as a safety measure to ensure services to clients are safe, ethical and competent,
- it will endorse and maintain consistency with professional and organisational standards & practices,
- it will enable innovative thinking, improve productivity and assist in staff retention.

Within some states of the USA clinical supervision was provided utilising technology. All school nurses within the county have access to an on-line group provided by a company called ‘PB Works’. It provides a framework where school nurses can access networking, share ideas, gain clinical guidance and peer support. The programme is by invite only with relief nursing staff also having access.

Within the UK, clinical supervision is provided via a face-to-face group, which has a skill mix of school nurses and staff nurses (staff nurses are registered nurses without a School Nursing Certification). This is provided within working hours for 3 hours per month. Since school nurses in the UK work from a community health clinic, the opportunities for peer and individual reflection can often emerge effortlessly at the end of a busy day.

Swedish school nurses, working within public schools, work under a clinical supervisor whom they can approach for guidance and advice on their practice. In contrast, Sweden’s independent sector nurses do not have any required clinical supervision. SA school nurses, within the independent sector, are also working autonomously and currently with no clinical supervisory lead.
These variances occur in Sweden despite the independent schools receiving government funding and sitting under the same legislation as the public sector that requires all schools to have a school nurse.

For school nurses, evaluation means the assessment of the attainment of outcomes, including measuring and assessing meaningful health and academic outcomes (NASN 2016). Evaluation should be applied to the school nurse practice and health service and is usually part of the clinical supervision role of the school nurse’s manager or coordinator. In some independent schools this may primarily be the school principal in conjunction with the state or national nurse registration body. Evaluation may be done as a performance appraisal or as submissions on revalidation of the nursing registration. In areas where there is clear clinical governance, such as the UK’s NHS or the state Departments of Education in the USA, there are formal opportunities for clinical review with standardised forms. Informal opportunities for evaluation exist within local school nurse associations and peer review discussions.

In SA, whether a school is independent or public, should not dictate whether clinical supervision is essential. Strong, consistent health governance would be beneficial for directing health practice. The need for clinical supervision for school nurses within SA is evident as essential. Clinical supervision would disseminate knowledge and enrich professional growth and clinical skills. This platform would provide an optimum learning arena for SA school nurses regarding care planning and case management of clients with unclear care pathways.

The USA, UK and Swedish models of supervision prompted consideration of the need to establish a clinical lead or allied health staff member, who could provide direct on-site or telecommunications consultancy, to improve supervision and guidance of school nurses as needed.

The use of an on-line group would additionally offer the greatest opportunity for clinical supervision for school nursing staff in rural and remote areas to work together within SA. By using online tools as a knowledge base where staff can collect, organise, search, and share useful information would be a favourable initiative.

![Figure 10: NASN’s Framework for 21st Century School Nursing Practice™](image-url)
NASN’s *Framework for 21st Century School Nursing Practice™* highlights clearly, within the categories of leadership and quality improvement, the need for the essential strategic governance and departmental leadership to achieve the overarching standards of practice. (NASN 2016)
Policy Development

Policies are identified as fundamentally essential to an organisation as they provide the framework which maintains organisational guidance and control.

Governing bodies, such as the Department for Education and Child Development (DECD) and SA Health, have strong policy frameworks. These frameworks drive organisational decision making, provide direction, ensure best practice, reduce direct management supervision, build confidence in service delivery, ensure consistent practice and protect staff and clients.

SA Health describes policy and guidelines in the following statement:

‘High-level strategic policies give effect to the visions and directions of the government and guide the whole direction and culture of the department or the portfolio. Policies inform staff of their working arrangements in terms of process, content, attitude, priority and urgency’ (SA Health 2016)

Policy frameworks were accessible and present in all states and cities visited. The specific policies available were consistent with policies found associated with SA Health and DECD.

SA school nurses are currently responsible for the development of their own policy structure within their individual school's organisational policies. Formal training in policy writing is vital as this skill does not naturally occur for all nursing clinicians. It is imperative that SA ensures that all schools, public and independent, have best practice health policies. Consistent policy development remains a vulnerability within SA school nursing practice. Departmental governance, providing excellence and expertise in the area of policy development, would address this area of vulnerability and be a significant building block in the area of school nursing practice in SA.

Clinical Guidelines

In line with the Australian National Health and Medical Research Council (NHMRC) (NHMRC 2014), clinical guidelines are recognised in Australia as a set of endorsements. These endorsements are based on the best available evidence, established on the identification of regular procedures and created to make clear recommendations for the care that health professionals provide, as agreed by expert stakeholders.

Clinical guidelines for professional practice were strongly supported throughout all three countries.

A significant amount of discussion occurred throughout the tour regarding the fact that there are currently no specific clinical guidelines or manuals within school nursing in SA. The ‘National School Nursing
Professional Practice Standards’ are available and endorsed nationally by the Australian Nursing and Midwifery Federation (ANMF). These standards have been reviewed and are currently awaiting further ratification by the ANMF regarding SA practice. (ANF and VSN 2012)

The intention of reviewing clinical guidelines during the tour was to find a robust system defining and detailing the description of the scope and roles of school nursing practice. During our observations, we were able to view clinical manuals that integrated valuable concepts to assist school nurses in developing the procedural aspects of individualised health care plans for students with special health care needs. They provided task-specific instructions for school nurses and other school personnel, when indicated. These competencies were also used to assist newly trained school nurses and relief school nurses in their school nursing practice.

Clinical guidelines that address procedures are intended to be used as a standard in conjunction with:
(CSDE n.d.)

- sound theoretical knowledge
- medical research and evidence-based clinical references
- collaboration with professional peers and expert consultants
- collaboration with students, educators, families and caregivers

This investigation reinforced the need for all school nurses in SA to have access to clinical guidelines in line with SA Health and the Women’s and Children’s Health Network (WCHN) intranet. It was identified that with collaboration from key stakeholders this could be adapted for school nursing clinical guidelines provision. Referral pathways development, like that which is current within the WCHN, could also be utilised. Examples of referral pathways include: Family Safety Framework, Child Safe Environments and Guidelines for Working with Suicidal Person.

**Required Educational Qualifications**

The complex range of health issues presented to a school nurse requires the skills of a well-qualified and experienced nurse. School nursing is a recognised speciality nursing practice in all three countries we visited and these countries had high expectations of their nurses.

In all three countries, the minimum qualification required to be called a ‘school nurse’ was a Registered Nurse qualification. In Sweden and the UK, a 3-4 year program of study at a university or college was needed to obtain a nursing degree, a Bachelor of Nursing. In the UK, nurses must choose a specialty nursing stream for their degree: adult, paediatrics, mental health or learning disability. In Sweden, the degree training was general. In the USA there are two ways to become a Registered Nurse. At a minimum, a nurse will need an Associate’s Degree in Nursing (ADN). The ADN involves a two year
program at a community or junior college and will enable the nurse to hold an entry level position only. Many nurses commence nursing with an ADN and then complete further study for their Bachelor degree. A Bachelor of Science in Nursing (BSN) usually takes four years and is awarded by a college or university and is usually the minimum required to undertake school nursing. All nurses have to earn state licensure after they graduate from an education program. Part of earning licensure is taking the National Council of Licensure Examination for Registered Nurses (NCLEX-RN). The NCLEX-RN is a test conducted by computer. The number of questions will vary as the computer keeps providing questions until it determines if the applicant is qualified. (NCSBN 2016) Other licensing criteria may be required for nurses by each state and in the USA the nurse is often required to be licensed with their Department of Education.

Some schools had nursing assistants working underneath the school nurse’s supervision. These assistants had a variety of qualifications and titles. In the USA, these nurses were called a Licensed Practical Nurse (LPN) or a Licensed Vocational Nurse (LVN). In the UK, they were called Health Care Assistants (HCA) or Assistant Practitioners (AP). These nurses have usually completed a one year training program at technical schools, vocational schools or community colleges.

Many states and counties in the USA and the UK require further qualifications before a nurse may be called a ‘school nurse’. The USA’s National Board for Certification of School Nurses offers an examination for an accredited School Nursing Certificate (SNC) to nurses with an acceptable Bachelor’s degree and a minimum of 1000 hours of clinical school nursing experience. (NBSCN 2015) Registered nurses may be employed without this qualification if there is a shortage of nurses but these nurses then have a required completion time of the certification to maintain their position. Variances occurred regarding basic requirements throughout the states visited. New Jersey for example, requires all School Nurses to have BSN, and Master of Science in Nursing (MSN) with SNC, however New York recommended SNC but it is not an enforced requirement.

School Nurses who wish to hold leadership positions undertake further qualifications such as the Master of Science in Nursing (MSN) with a School Nurse focus. This qualification involves theory and supervised practicum, which may incorporate a variety of advanced practice nursing disciplines, such as ‘Pediatric’ Nurse Practitioner (PNP) or Family Nurse Practitioner (FNP). This may then lead to a Doctorate of Nursing Practice (DNP) which focuses on training in research methods and leadership skills. These degrees require a further 1.5-3 years of study.

In the UK to be a qualified school nurse, the nurse needs to obtain their Specialist Community Public Health Nurse (SCPHN) qualification which is run at Masters level over one year full time or two years part time and gives 120 credits (6 modules) towards Master’s degree (two thirds of a Master’s degree). Practicum is undertaken in local NHS trusts under the supervision (direct or indirect) of a School Nurse who has undertaken preceptorship training. Some school nurses can be employed without SCPHN
qualifications in some Independent schools, but schools in the local NHS Trust require the SCPHN qualification or working towards the SCPHN qualification. This qualification is registered with the Nursing and Midwifery Council.

Sweden also offers further qualifications to become a School Nurse or a Children’s Community Health Nurse. This free course is run at Masters level and usually takes one year. Nurses can only undertake this training if they have had two years’ experience after their basic training but many are employed as school nurses whilst they are undertaking the post-grad qualification due to a shortage of qualified school nurses.

For an efficient and highly skilled workforce of school nurses within SA, collaboration with universities to provide a high level of school nursing certificate training is required.

Table 1 offers examples of recommendations for education requirements and the skills and experience a school nurse should have to practise in SA.

<table>
<thead>
<tr>
<th>RN 3 Clinical Lead for School Nurses providing Clinical Leadership for staff within 4-5 schools (An identified cluster of schools)</th>
<th>RN 2 School Nurse 1 per 400 pupils Extra staff RN1/ EN for larger schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN working towards Diploma in School Nursing with option to extend to MSc/ EN with Medication Diploma</td>
<td>Staff to come with pre requisites to role of Senior First Aid and Child Safe Environment</td>
</tr>
<tr>
<td>Staff to come with pre requisites of leadership in nursing, working with children and young people and multi-agency working.</td>
<td>Staff to complete 1-week intensive orientation training prior to commencement which will include:</td>
</tr>
</tbody>
</table>
| Some examples for a Diploma in School Nursing to include:  
  - Sexual health  
  - Leadership  
  - Immunisation  
  - Child Safe Environment  
  - Communicable Disease Management.  
  - Senior First Aid/Triage Skills  
  - Partnership Training  
  - Mental Health to include: cyber bullying/ sexting  
  - Attachment Theory | Governance  
  - Standards and procedures  
  - Surveillance  
  - Documentation  
  - Data collection  
  - Referral pathways |
| Health promotion  
  - Sexual health  
  - Communicable disease  
  - Mental health  
  - Immunisation | Triage Introduction |

Table 1: Recommendations of education requirements and the skills and experience required of a school nurse to practise in SA
Skill mix

As identified, each country has their own educational expectations and professional qualifications. Many consistencies were evidenced in the recognised importance of post graduate qualifications, reflective of the importance placed on the experience needed to fulfil the complex role of a school nurse.

Diverse qualification standards influenced the professional skill mix of school nursing teams. Despite the variances, consistently all prime school nursing positions were filled by a Registered Nurse. Collectively the international school nursing teams were made up of the following personnel:

- **Nurse Supervisor / Nurse Manager / Lead Nurse / Head Nurse**: 1FTE with MSN
  - Clinical lead for school nurses:
    - Baltimore - oversees 4-5 schools in a cluster
    - Monmouth – oversees up to 12 school nurses and 1:1 nurses caring for special needs
  - Role is to disseminate clinical information and be a representative for school nursing at council / district / municipality level which also includes being aware of current legal requirements and funding.
  - Supervision of up to 7500 students

- **School Nurse**: 1FTE (majority of positions) - Registered Nurse (RN) SNC (at least one per site). In some states, must be at least working towards SNC

- **Substitute School Nurse**: Registered Nurse awaiting SNC completion (approved relief pool)

- **School Nursing Students**: work under the direct and indirect supervision of the School Nurse

- **Nurse Practitioner**: 1FTE – responsible for a cluster of schools. The Nurse Practitioner is recognised as an integral care provider, delivering primary care services including: chronic disease management, immunisations, treatment of minor illnesses, manage and prescribe medication along with minor specimen collection.
Allied Health Services included but were not limited to:

- Specialist Medical Consultants: eg Pulmonary Paediatrician - monthly clinic (population health initiative to decrease morbidity associated with asthma)
- Dental Clinics
- Psychologists (consults with the multi-disciplinary Team: Nurse, Special Education, Deputy Head)
- Guidance Counsellors (no Psychologist involvement)
- Elementary and High Schools have a Clinical Psychologist and Crisis Team from the local hospital working with the multi-disciplinary team for high risk students
- Interpreter resources for cultural, non-English speaking and linguistic diversity
- Disability Services - Baltimore disability service teachers, therapists and nurses all had their Masters or equivalent plus all school administrators were certified in special education.

Education and specialist qualifications were given strong emphasis throughout the study tour with clear evidence through the language used regarding education expectations.
Continuing Professional Development (CPD) Requirements

As with all specialty areas within nursing, continually changing health needs necessitate the school nurse to demonstrate they have maintained competency in their role. A strength within Australian nursing is the nationally consistent continuing professional development (CPD) requirements.

The international requirements for revalidation of the basic nursing qualifications varied widely, especially in the USA. Each state in the USA has its own requirements for CPD needed to maintain registration. It varied from no set number of CPD hours (Maryland) to 30 CPD hours over a 2-year period (New Jersey). Some states had mandatory components of CPD to be completed, for example New York required Infection Control and Child Abuse training every 4 years. In the UK and Sweden, it was a standard requirement across the country. The UK nurses needed 35 hours of CPD over a 3-year period to maintain their basic registration. Swedish nurses need between 4 and 60 hours of CPD hours per year and midwives need between 4 and 80 hours of CPD per year.

For the nurses to continue their qualifications as a qualified school nurse, the CPD requirements were more highly regulated. To maintain their Nationally Certified School Nurse (NCSN) title in the USA, the nurses were required to complete 75 hours of continuing professional development in the 5-year registration period. These hours of CPD must relate to school nursing and approved by a national accrediting agency, state department of health or education or an accredited training facility, e.g. university. Courses for basic nursing preparation are not considered suitable CDP for NCSN recertification (e.g. first aid, screening assessment). Online continuing education courses, such as those provided for by the National Association of School Nurses (NASN), are acceptable for credit if approved by an organisation recognised by NCSN. All continuing education information is submitted online as part of the reaccreditation process and is subject to verification.

In the UK, the revalidation the Specialist Community Public Health Nurse (SCPHN) qualification is completed as part of the reregistration with the Nursing and Midwifery Council and SCPHN nurses must demonstrate 450 hours of relevant clinical practice. All revalidation is submitted electronically and requires a reflective portfolio and employers to counter sign the application.

Informal and formal continuing professional development was offered to school nurses through their state or national school nurse associations. In some areas the local health authority and hospitals also provided courses and updates. Universities such as Monmouth University in New Jersey and Boston University in Massachusetts often provided extensive CPD programs for school nurses. Boston University had a dedicated School Health Institute for Education and Leadership Development (SHIELD) offering programs to nurses and medical staff in school health. (BUCMECNE 2016)
The continuing education of school nurses was seen as vital in maintaining a highly skilled workforce. The isolated nature of school nursing requires nurses to act confidently, expediently and capably, often with little external support and usually dealing with a myriad of health issues. For the school nurse: retaining and upgrading health information is critical to the safety of their school community.

**School Nurse Association**

The role of a school nurse needs support and guidance. This direction may come from the clinical leadership and governance provided by the employer but refining the quality and consistency of school nursing requires the assistance of a dedicated School Nurse Association.

We are fortunate in SA to have a passionate and proactive School Nurse Association: SASNA, South Australian School Nurses Association, but to maximise this potential, the formation of a National Association is required.

The USA has been fortunate to have a national association since 1968 when the Department of School Nurses was established within the National Education Association. This Department aimed to improve the quality of school nurses and school nursing and, in doing so, to increase the ability of children to succeed in the classroom. State associations were formed and the Department expanded and in 1979 the National Association of School Nurses (NASN) was incorporated as its own entity. NASN is now heavily involved in governmental discussions at all levels and contributes to Health Policy decisions, as well as providing the recognised standards of practice for all school nurses. (NASN 2016)

While each state has their own association, most of these associations are affiliated and represented at executive level by NASN, whose mission is ‘to optimize student health and learning by advancing the practice of school nursing’ (National Association of School Nurses, 2016). This facilitates the consistency of information and protocols between states and increases the advocacy impact of NASN. This dual membership of both the state and the national association proves cost effective to both the nurse and the association. Support available through NASN includes conferences, webinars, podcasts and journals such as the Journal of School Nursing, NASN School Nurse, NASN Weekly Digest and NASN Bookstore. These publications are aimed at improving the health of school children and the school community enhancing school nursing practice through facilitating communication and evidence based research.

In the UK, school nursing only received its own dedicated association in 2006. Previously school nurses had to rely on representation through the Royal College of Nursing, the Community Practitioners and Health Visitors Association or the Institute of Health Visiting. The newly formed School and Public Health Nurses Association (SAPHNA) has chosen to remain non-union affiliated to fully focus on professional issues and is now recognised as the leading professional association for school nurses in the UK. SAPHNA offers professional advice, support and professional development for school and public health
nurses through their Journal of School and Public Health Nursing, conferences, events, bulletins, website, research and social media. (SAPHNA 2016)

Sweden has a National Association of School Nurses and provides professional development and professional support including the provision of conferences, online education and publications such as Skolhalsan. Nurses from both the public and private sector are encouraged to join.

The benefit of a dedicated national association is immense. From providing the promotion of excellence in practice, and evidence based policy and procedure guidelines to education and professional development opportunities. State associations can still operate under the guidance of a national association as each jurisdiction will need to acknowledge and abide by their applicable state laws. Affiliation with the unions, either education or nursing, may be necessary at least until the Association has sufficient members for self-momentum.

Other Networks Available

School nurses in the USA have the benefit of governance structures with supervisors in charge of a cluster of school nurses and those supervisors have coordinators overseeing their practise. This structure forms a strong network of clinical support for the nurse often working in an isolated role within the school. Other networks and support includes area or regional school nurse meetings of counties or districts, i.e. regional areas under the jurisdiction of the supervisor as well as support provided locally by state organisations such as the New Jersey State School Nurse Association or The New York State Association of Independent School Nurses.

Supportive working relationships are sometimes established with local hospitals. Some schools have the benefit of a relationship with mental health crisis management teams from hospitals, such as was evident at the Neptune Wellness Centre, Neptune Township School District. A hospital concussion team provides information services to parents and students at The Browning School, New York and relationships with Children’s Specialty Hospitals in Washington DC provide nurse education and support. Within the school environment, supporting networks for school nurses consist of team meetings of school staff such as regular meetings with the school principal, psychologist, counsellor, special needs teacher and other support personnel. Online professional development and online resources can be utilised as well as school nursing guidelines, manuals and tools. Support can also be gained from nursing colleagues especially if there is more than one nurse at the school or colleagues at neighbouring schools, including nurse practitioners or school doctors.

In the UK, support networks are firmly embedded and school nurses had strong clinical supervision and guidance from nurse managers and team leaders. Additionally, some trusts such as Liverpool Community
Health NHS Trust have developed a strong school nurse mentoring program with specific standards and adherence to triennial reviews, developing the school nurses’ experiences and promoting professional development (NHS, 2016). The School and Public Health Nurses Association (SAPHNA) has many partners who provide additional supportive networks for school and public health nurses such as Health Education England, Public Health England, School Nurses International, Medical Officers of Schools Association (MOSA), Royal College of General Practitioners (RCGP), Association for Young People’s Health (AYPH), British Youth Council, (BYC) and the Nursing and Midwifery Council (NMC). Another supportive network is the Community Practitioners and Health Visitors Association, (CPHVA) which is a professional trade union for school nurses, health visitors, nursery nurses and other community nurses working in primary care. The Institute of Health Visiting (IHV) is a network centre of excellence, supporting the development of universally high quality health visiting practice. They ‘work closely with [their] members, the public health workforce and wider community to develop and implement a wide range of policy and projects to educate and empower individuals, effect change and celebrate excellence’ (IHV, 2016).

The Swedish system offers the public school nurse supportive clinical networks through the overarching County Chief of the Health Care System. Guidelines, policies and mandates are delivered through this framework and the nurse has a natural pathway for advice and professional guidance from their clinical supervisor. In the private school system, however, the nurse is clinically isolated and works autonomously developing guidelines and policy for their school, in line with the directives from the school principal. Public school nurses have regional school nurse associations for professional networking such as the School Nurses Association of Vallentuna and the Swedish Association of School Nurses provides professional development and professional support. The seven school nurses from the Vallentuna school area meet weekly to discuss professional issues and provide collegial support. In the school setting it is common practice to participate in weekly staff team meetings. Marie Nordstrong, School Nurse, Gymnasium, Vallentuna, stated during an interview on 26 October 2016:

*The team meets weekly usually with the school principal, counsellor, nurse and special needs specialist. We aim to implement structures rather than focus on individual student issues: i.e. work with implementing systems to keep students in school and look at the environmental structures or do whole group work in class.*

School nurses have access to school nurse guidelines on the website and can utilise the Central Resource Centre for Health Care officers for advice and guidance.

South Australian support networks are fragmented. SA school nurses have the support of the Australian Nursing and Midwifery Federation, SA Branch’s “School Nurses Reference Group” and their own South
Australian School Nurse Association. Some school nurses have established their own professional connections with local medical practitioners and hospitals but there is no consistency.

South Australia would benefit from a school health service with a strong guidance and clinical support network such as Nurse Managers and Team Leaders. This would ensure that regulations and health policy would be standardised plus information easily disseminated, and would reduce the barriers associated with the isolating nature of the work of a school nurse, thereby improving the quality of care provided to students.

Best practice would be achieved through school nurses establishing formal connections with hospitals in South Australia, such as the Women’s and Children’s Hospital. These connections could result in improved service delivery and an enhanced potential for referral pathways, improving current service provisions.

**Cost Benefit Analysis**

It is understandable that policy makers and decisions makers look to cost-benefit analysis to improve their understanding of the value of a school nursing service. The consistent message from all executive health personnel was that emerging health needs of school age children will put further drain on health care systems and society for generations to come if radical transforming health programs are not implemented. Repeatedly these leaders advised of the need to investigate and proactively pursue the cost benefits of primary, preventative and public health roles within the school settings. It was also their experience, that nurse-led school health programs are evidenced based investments in the overall cost of running an efficient and effective health system.

The UK Royal College of Nursing made the following statement:

‘As economic pressures increase, it is essential that UK governments support and invest in public health and preventative measures focused on children and young people. When well-planned and coordinated, school nursing interventions reduce problems throughout childhood and adolescence, promote self-care and resilience in communities, and prevent ill health occurring in the first place. This supports long term health and wellbeing and the increased likelihood of children growing up to be healthy adults’. (RCN 2012 p.3)

The USA places a significant focus on the investment of data collection and provided two cost benefit reports for our investigation: one complied by the NASN, *The Case for School Nursing* (2012) and the second, a report entitled the, *Cost-benefit study of school nursing services* published via JAMA Pediatrics (formerly Archives of Paediatrics & Adolescent Medicine). Both used with permission with some cross over of data evident.
NASN’s report recognised that, in 2012 when the data was collated, there were significantly more children requiring special education and suffering from medically fragile conditions and chronic illnesses than in the history of recorded school nursing. The prevalence rates of asthma, severe allergy, diabetes and mental health needs have dramatically increased within our young people. Some of the statistics reported are as follows:

- From 2002 to 2008, the percentage of children in special education with health impairments due to chronic or acute health problems increased 60%.
- USA Preterm survival has increased to more than 80% of those infants born at 26 weeks’ gestation, and more than 90% of those infants born after 27 weeks’ gestation. As the rate of survival of preterm infants increases, so do the number of children entering school with moderate to severe disabilities and learning and behaviour problems. Complications of prematurity persist through adolescence. Continued monitoring of preterm infants through adolescence is needed to ensure the provision of appropriate school services. Currently in SA the major focus is on the 0-5yr age group, with monitoring through CaFHS.
- 9.4% of all USA children have asthma. Low socio economic or African American students with asthma in schools with a full-time nurse missed significantly fewer days than those who had a part-time nurse. Current statistics from Asthma Australia (n.d.) show that 1:10 Australians have Asthma. Currently only 41% of Australian children under 15yrs are being managed appropriately through an asthma action plan. 21.8% of people with asthma aged 15-25 require time off school, work or study due to their asthma. $655 million was spent on asthma in 2008-2009 in Australia, which is 0.9% of all direct health spend on diseases.
- Among the USA adolescents aged 12 to 19 years old the prevalence of pre-diabetes and diabetes increased from 9% to 23% between 1999 and 2008.
- Eight percent of USA children have a food allergy, with almost 40% having a history of a severe reaction. The prevalence of food allergy among children under the age of 18 increased 18% percent from 1997 to 2007. Peanut allergy doubled in children from 1997-2002. In a survey of USA school epinephrine administration, approximately 25% of had no previous food allergy diagnosis.
- Overall, from 13 to 18 percent of USA children and adolescents have some sort of chronic health condition, nearly half of whom could be considered disabled.
- Approximately one in five USA children and adolescents has a diagnosable mental health disorder and 5% percent have extreme impairment in functioning. Additionally, 20% of students may have undiagnosed mental health problems; all of which directly and indirectly interfere with their academic outcomes. School nurses spend 32% of their time providing mental health services. Student mental health needs are further supported by Sallyann Sutton, Professional Lead for School Nursing, Walsall Healthcare NHS Trust who stated in her article Building Resilience in Children and Young People’s and their families – The contribution of School Nursing, that half of all mental health problems are
established by the age of 14 and 75% by early adulthood. Despite 1 in 5 children and adolescents having a diagnosable mental health problem accessing support remains a challenge.

The study concluded that school nursing services were a cost-beneficial investment of public money and warranted policy and decision makers to carefully consider the resource allocations made to school nursing positions.

The findings from this study are supported in NASN’s outline: ‘Five ways a School Nurse Benefits the School’ (NASN 2016) below.

The Cost-benefit study of school nursing services (Wang et al 2014) measured programme costs of nurse wages and medical supplies throughout 78 Essential School Health Service (ESHS) districts, during 2009-2010. This data was based on a school health service being delivered by a full-time baccalaureate-prepared registered nurse.

The programme benefit parameters were the savings in lost time from both teachers dealing with student health issues and parent lost time from work due to student health needs plus the cost associated with medical procedures. The results showed ‘at a cost of $79.0 million, the ESHS programme prevented an estimated $20.0 million in medical care costs, $28.1 million in parents’ productivity loss, and $129.1
million in teachers’ productivity loss. Thus, the program generated a net benefit of $98.2 million to society. For every dollar invested in the program, society would gain $2.20. Eighty-nine percent of simulation trials resulted in a net benefit’. It was also identified that dismissal rates for unwell students were 3 times lower when a school nurse was present.

Both cost-benefit studies’ conclusions included:

- School nurses reduce absenteeism and a higher nurse to student ratio is related to better attendance
- School nurses are significantly less likely to dismiss a student from school early than non-licensed personnel
- One study of 18 school districts found the intensity of policies and programs in school health services was significantly related to graduation rate
- Lower school nurse caseloads, training and support result in school nurses providing more case management services for students

Although the tour did not include Canada, Dr Erin Maughan, directed us to a Canadian cost benefit study on Mental Health services titled Every Door is the Right Door (OMAG 2009), which highlights that clients seeking health professional support will ‘try many different doors’ in order seek the help and support they need.

“People experiencing mental health or addiction issues often quietly ask for help. As a care provider, you sometimes have to listen very carefully to hear what someone is telling you. They may not ask for help directly or walk through the door of the office that provides them with the service that they need. The whispers for help may be seen, not heard: a child falling asleep in school, an elderly woman admitted to a hospital for dehydration, the teen that just doesn’t ‘fit in’, or the man caught breaking into cars.” (OMAG 2009 p.17)

School nurses are strategically positioned within the community as frontline health professionals to support the variety of growing health needs within our community. The Canadian report goes on to state that health programs are often designed to meet provider needs rather than those of the client. This can be translated into: difficult booking systems, lack of accessibility and availability, contributing to the overcrowding of services resulting in ineffective long term client health outcomes. School nurses provide the multi-disciplinary central role within allied health services providing “the right care by the right professional at the right time and the right place”. (SA Health 2014)

This study tour emphasised the role of a school nurse, highlighting that nursing by its very nature is holistic, collaborative and diverse. The investigations of the tour strengthened the understanding that school nurses hold a noticeably different role to that of allied health services and are strategically
positioned within the community as frontline health professionals. Nurses provide day-to-day case management, care provision and service direction which supports the health and well-being care provided by allied health service.

**Data Collection**

Data collection and analysis play a significant and vital role in allowing policy and decisions makers to predict trend and, in turn, determine plans for the future. This is especially valid in the school health arena when both health and education budgets are under strain. As South Australian school nurses, it is essential we look to further investigate ways to direct data collection regarding 5-19 year old’s and their health requirements. Data can clearly demonstrate the impact of school nursing on the health and academic success of students. The type of data collected can range from simple attendance numbers to sophisticated analysis of health trends involving statisticians employed by government departments, as happens in Massachusetts and London, or the predictive analysis software “SPSS” used by Monmouth University to analyse data for their research. SA would benefit significantly from a structured school nursing program of targeted data collection and subsequent analysis.

Within USA school nurses collect rich and important data. Organisations such as the National Association of School Nurses (NASN) are pivotal in collecting national school health data. Their project “Step Up and Be Counted” is in its third year of collecting a national uniform, standardised data set from school nurses across the USA. (NASN 2016) The study is looking at the number of health personnel in schools, the number of students with chronic health conditions and the presentations to the school health office.

In Boston the Department of Public Health’s School Health Unit’s works in collaboration with key epidemiologists to collect annual data that outlines the health care that has occurred within Massachusetts schools.

The National Childhood data collection started in the UK in 2006 in recognition of the growing obesity problem. There has now been a decade of data provided by school nurses. Specific needs can be identified and school public health plans can be devised and areas such as bullying and mental health can be targeted. The UK uses the Lancaster Model, which is a sustainable health needs assessment process providing a cyclical approach of staged contacts to gain evidence of the needs of children, young people and their families. This tool provides a vehicle to deliver the Healthy Child Programme 5-19 years and a continuum of information and data to direct and influence the commissioning process and improve service provision and outcomes.

The visit to Sweden highlighted the important data collection of children who are asylum seekers. In 2015, there were 35,000 children and young people (under the age of 17 years) arriving in Sweden without parents or care givers. The school nurse reviews the children and young people at school for a 60-
90-minute health interview. The interview is conducted with interpreter and referrals can be made to a school doctor or hospital as required. Immunisation status is checked and vaccinations administered as required. Other checks include height, weight, vision, hearing, scoliosis assessment and blood tests for diseases including HIV.

Data may be collected for auditing and funding purposes. In the USA, schools have funding linked to the number of students who are fully immunised and the number of days absent by students: so it is imperative that this information is current and clearly coded. Designing the best objectives and questions for surveys is crucial to obtaining the right information for the assessment of programs. Baseline data should be obtained any time a change is to be implemented.

Evaluation of data collected is often done by the various health authorities in each country. This assessment of the data can demonstrate the days lost from illness, e.g. asthma, diabetes; the number of ambulance call outs and the number of parents called in from work thus losing work productivity versus the number of children treated and returned to class. Data can also be used for screening purposes, environmental concerns, e.g. lead levels, and depression and suicide prevention programs. Analysis of ongoing childhood and youth screening programs such as vision, hearing, weight and dental issues can influence future targeted health programs to be designed to meet actual needs instead of perceived needs and ensure the appropriate skill mix of staff.

In any area of healthcare, data collection that clearly documents outcomes and fiscal results is vital. Evaluation of this data and the effectiveness of a health service should be undertaken regularly and proactively to validate the significant impact a school nurse can have on the current and future health of a nation’s children and youth.

**Technology**

Most of Australia’s youth have been born into a world of internet and mobile phone usage and technology dominates their lives. A study by the Australian Communications and Media Authority (ACMA, 2016), *Aussie Teenagers on Line* identifies that as of June 2015, over 935,000 teens had gone online in the previous four weeks. That is equal to 82% of all young people and an increase of 74% since 2011. 83% are accessing the internet 3-4 times per day. According to the study, 80% of Australian teenagers aged 14-17 years own a smart phone. This was higher than seen in UK and USA. The peak time for going online for young people was between 5-10pm, where email and social networking was high on the online activities being undertaken (ACMA 2016)

In 2014, the Premier of South Australia signed the ‘Digital by Default Declaration’, promising the use of services in technology. The hope from this policy directive is that all South Australian’s will be able to interact ‘online at any time and at any place’ (ACMA 2016) School Nursing needs to be able to offer this accessibility to our youth to improve access and support.
Accessibility and visibility of the school nurse is vital. Technology offers the ability to reach students when a face-to-face interaction is not possible. Services such as UK’s ‘Makewaves’ offer a safe social learning platform where students can learn key public health issues and earn digital badges recognising educational achievement. (Makewav.es, n.d) Health information apps, such as UK’s Southern Health Children in Care Service’s Mobile App, store health records on the young person’s mobile phone ensuring the information is readily accessible wherever they may be. (Southern Health NHS, 2015)

In 2012, the UK’s Prime Minister announced the creation of a ‘Nursing Technology Fund’ to support nurses, midwives and health visitors to make better use of digital technology (NH S England, 2012). One of the successful applications was a texting service set up by a group of school nurses from Leicestershire, England. The school nurses teamed up with young people and created ‘ChatHealth’, a programme that 11-19 year olds can use on their smartphones to send a discreet SMS text message to a school nurse anytime and anywhere.

ChatHealth (Endicott J 2015) has safe guards for security and maintaining confidentiality and anonymity, if desired. The service is supervised by a small team of trained school nurses during office hours who will respond to all texts within 24 hours, even out of school term time. The service allows the young person to start a texting a thread with an allocated school nurse. The questions asked can be about any health matter; such as emotional health, drugs and alcohol, sexual health and weight management. No message ever goes unanswered, with automated texts signposting alternative sources of help out-of-hours. ChatHealth has reduced the stigma attached to seeking help and shown a successful benefit for male users, with double the number accessing text support compared to face-to-face clinics. The service is regularly evaluated by focus groups, surveys, peer review and ‘mystery shopper’ visits. The NHS and ChatHealth have developed a Marketing Resource Pack to encourage the implementation of the service in other jurisdictions. (NHS England 2016)

Remoteness, embarrassment and time constraints may limit the ability of young people to access their school health clinic. The use of technology such as emails, SMS texting, SKYPE or Telehealth in a school nursing service could reduce or eliminate those barriers, helping young people to achieve healthier lifestyle choices while still at school.

The implementation of technology resources means:

- A wider audience can be reached and from anywhere in the state
- The advice offered could be an effective way of reducing key targets such as: obesity, teenage pregnancies and mental health etc.
- Increased choice for young people on when and how to access confidential, help and advice
- Reduced stigma and social barriers
- Value for money - less nursing staff required
- Early contact for health advice has the potential to prevent escalation to costlier interventions: reducing hospital admissions and presentation to emergency departments or family doctors for minor ailments
- Improved inter-agency collaboration and reduced duplication of services

Embracing technology enables school nurses to manage record keeping, data collection and facilitates access to health education and resources. It also allows the school nurse to disseminate relevant and timely health information to their nursing colleagues or the public, whether by using Twitter, Facebook or a web page.

The USA school health system has incorporated a variety of technological methods. In Baltimore, the County Public School Nurses have their own secure interactive Wiki to encourage the sharing of links and resources to promote best practice. (BCPS 2016) The electronic record model of choice observed in USA schools was a medical documentation and tracking software suite that manages every aspect of student health related data: School Nurse Assistant Program (SNAP) (SNAP 2015).

This software allows the school nurse to source from a single location:

- quick review of a student’s health history
- visit history to the health room
- screening progress
- immunisation status
- current medications
- documentation of children and young people
- customised letters
- analysis of health data
- promotes communication
An example of the efficiency of having an electronic health record was when the H1N1 flu virus spread in 2009. School nurses in the USA were able to quickly track how many children and young people were being dismissed from school, with similar symptoms. This was then reported to the Departments of Public Health and prompt action could be taken.

The use of electronic health records by school nurses in SA schools could provide government departments with valuable data and evidence to determine the services required for children and young people. Data collection and statistical analysis could also be used for the evaluation of school health programmes, quality assurance and disease surveillance.
Student to Nurse Ratios

Given that the most significant factor in a framework budget is school nurse wages, consideration of student to nurse ratios is critical to ensure economic viability.

Dr. Laura T. Jannone, Associate Professor Monmouth University recommended referring to Legal Issues in School Health Services: A Resource for School Administrators – written by Nadine Schwab, Mary Gelfman (Schwab, N and Gelfman, M 2005) when considering budgetary priorities. This resource reinforces recommended guidelines published by the USA National Association of School Nurses (NASN), in 1972, for the school nurse to student ratio. The recommendation was for 1 school nurse to 750 students, 1:250 when dealing with students with disabilities and 1:75 when caring for students with severe and profound disabilities. The document goes on to identify that these ratios did not take into consideration the inclusion of students with disabilities into mainstream classrooms, increasing mental health issues, complex behaviour considerations, psychiatric and medical needs, increasing ethnic diversity or the income disparity among the schools’ families.

Dr. Laura T. Jannone,
Associate Professor Monmouth University

From left: Petria McCallum, Denise McDonald, Dr Laura Jannone, Liz Rankin, Anna Thomson.

Ratios of nurses-to-students across the USA were reported to vary in range from 1:1500 to one nurse per school building regardless of the number of students present, despite some buildings having only 250 students. The NASN ratio guidelines were developed with critical collaboration between the USA equivalent of the Australian Health Practitioner Regulation Agency (AHPRA) and SA Department of Education, recognising the value of health and education input. Despite these guidelines, Washington’s public school nurse-to-student ratio is determined by local districts as they are the funding providers, resulting in ongoing inconsistencies with the caseloads across the states.

Anne Sheetz, MPH, RN, NEABC of Boston, outlined that in 1998 the Department of Public Health in Massachusetts issued a report to the State Legislature recommending that one full time equivalent (FTE) school nurse be employed per school building for 250-500 students and an additional 0.1 FTE for each additional 50 students above 500 (Sheetz, A 2007). Senior attorney Maura McInerney of the Education Department.
Law Centre (2013) writes: “the role of a school nurse today needs to be understood as being absolutely essential.”

The UK Royal College of Nursing (RCN) identified a fall in school nurses of 10% since 2010, and the UK Health and Social Care Information Centre (HSCIC) reported current ratios stand at one school nurse to 3333 students (2700 school nurses to 9,000,000 students). (Yorke, H 2016)

The Swedish Association of School Nurses recommends 400 pupils per full time school nurse. (School of Health Sciences 2012)

School nursing in SA would greatly benefit from ratio guidelines governed at the highest level to ensure equitability of service provision to our current and next generations of South Australians. While an optimal ratio in SA would become apparent with service determination, an initial commitment to a reasonable/workable ratio is required to ensure economy of scale benefits and a critical mass is achieved. Once established, nurse to student ratios can be adjusted to accommodate the desired (known or emerging) level of service delivery plus consideration would need to be given to reviewing current ratios if the current service provision is to be expanded or broadened.

**Funding Model and Wage Structures**

Funding models contributed significantly to wage structures and differed across all countries visited with additional variances evident within each country, states and municipalities.

The USA has a complex health care system with a variety of funding sources. There are separate public health departments for each state, state departments dealing with health issues affecting the wider population and local health departments focusing on health issues affecting local communities. Most school nursing services are funded by the government through local school district and special education budgets. Other funding sources for school nursing include health care systems, public health funds, community organisations and Medicaid reimbursement.

Most USA schools salaried their nurses in line with teacher pay scales, capped at 10 years. These salary structures include loading for nurses holding a Masters in School Nursing. Independent schools have the liberty of determining their own pay scale aligned to individual school classifications, often with the addition of professional indemnity, registration and professional development.

New Jersey reported that their public-school nurses are 100% funded by the Public Education System per the teachers’ pay scale, with the recommended ratio of one school nurse to 750 ‘well’ students. Notably their independent school parents insisted that part of the independent school nurse wage be paid through their taxes, being ‘public money’. This resulted in 50% of funding coming through government tax funds.
with the other 50% being paid by the individual independent school through parental contributions. Advanced Nurse Practitioners, providing supervisory/educational/management services for multiple schools situated within cluster school health and wellbeing units, are employed by the local public hospital.

In the UK, nurses employed by the National Health Scheme (NHS) are covered by the Agenda for Change (AFC) pay scales. (NHS HEE n.d.) Increasing numbers of school nurses are now being employed by local authorities (school and council) where terms and conditions vary.

Funding distribution in Sweden varies from the USA and UK, in that the main budget for education comes directly from the Government to the Department of Education (DoE) equivalent, and is then divided evenly between the public and independent sectors. The DoE pass on the budgeted funding to the municipalities who also receive a second line of funding from local resident taxes, similar to SA council rates. These collective funds are then distributed to cover education costs across both private and public schools. In some municipalities, the funding for the role of the nurse is withheld from general school funding and distributed through an appointed Chief of Operations for student health, school health and youth clinics. Karina Karlsson RN, Chief of Operations, Vallentuna, has responsibility for distributing the budget for student and school health, across the varied school locations on a needs basis inclusive of nurse wages. This model sometimes results in wage inequality between sites with nurses in areas harder to staff being paid more than those in popular sites. This occurs due to the Swedish Education Act requirement that schools must have a school nurse for each school site.

Summary of proposed budgetary considerations for a School Nursing program:

- School Nurse Total Salary Package (including Super Guarantee, Work Cover)
  - RN 3 Clinical Lead for School Nurses - Clinical leadership for five RN2’s or five schools within a cluster
  - RN 2 School Nurse - 1 per 400 pupils, maximum across 2 schools
  - Extra staff - RN1/ EN for extra pupil numbers beyond each additional 400
- Required indemnity insurance
- Professional development training and orientation programs
**School Health Room**

SA’s ‘Children's Centres’ provide care, education, health, community development activities and family services for families and their young children. The Department for Education and Child Development (DECD) state that:

"Children's Centres help parents and children to get the support they need, when they need it, within their own community" (DECD n.d.)

DECD recognises that when early childhood services work closely together they can provide the best support for children's development and their families.

While in the USA, a planned visit to the Henry Street Settlement (HSS) in Manhattan, New York provided an appreciation of one of New York City’s earliest family centres. It showed how many services from different agencies can work together to serve the whole community. The reflections from this visit could offer a comparison of this service and services currently provided in SA Children’s Centres. The settlement is located on New York’s Manhattan’s Lower East Side. This area has one of the highest poverty rates in Manhattan, with 30% of households in the district earning under US$20,000 a year (HSS 2016) and has historically been one of the most ethnically diverse and low socio-economic communities in USA.

The ‘Health and Wellness Settlement’ at Henry Street could be compared to SA’s Children's Centres. The aim is similar: to bring together a range of services for families and their young children at an almost ‘one-stop’ shop. What was noticeable with ‘The Settlement’ was the ability to provide assistance to the whole community, not just families and young people. The programmes and services provided at ‘The Settlement’ are able to quickly adapt with the differing demands of society, e.g. the provision of HIV/ AIDS programmes and post 9/11 support.

The potential benefit of Children’s Centres in SA having connections with a school nursing service site should be considered. The presence of the school nurse means they become visible and accessible, to not just children and young people but to families and groups in the community and allows for smoother transitions between services. With the school nurse being part of a wider team of key agencies, this allows for a better and more integrated collaboration of health services.

The school nurses in USA have a health room within the school setting. The rooms we observed varied in location and size. One particular example of an excellent location of the school nurse health room was at Blackstone Innovation Elementary School in Boston. The school nursing health room was positioned next door to a Community Health Centre. Services offered there included the same day treatment for common illnesses or minor injuries (non-life threatening) but require immediate attention. When a child or young person was identified by the school nurse as requiring further assessment, the school nurse was able to
refer to the Health Centre next door for further review from a paediatric health provider. This ease of access allowed for early intervention of treatment, prompt diagnosis and less time away from the classroom.

The opportunities to have a similar physical set up to this in SA maybe limited but the benefits to be gained from having clear referral pathways should be explored further with key partners, e.g., Local medical practitioners, Emergency Departments in hospitals, Child Protection Departments and Non-Government Organisations.

School nurses and/or clinical leads need to be actively involved in the school health room set up. Consideration of a health room for a school nursing service in SA should to include:

- **Location**: conveniently and easily accessible to students (and emergency services if required) and student support services, e.g. psychologist. Not in areas of high traffic or noise that hinders efforts to create a calm environment.

- **Design**: planned to support confidential interviews and privacy for examinations if required. Soundproof so conversations cannot be overheard. Access to bathroom and hand washing facilities and a private waiting area.

- **Equipment**:
  - A desk, a phone and a computer with the ability to store electronic health records and access to the intranet for accessing clinical guidelines, referral pathways and relevant documentation
  - Lockable medicine cabinets and discretionary ‘as needed’ medications
  - Height and weight measuring equipment
  - Equipment for vision, hearing and scoliosis screening
  - Stethoscope, sphygmomanometer, auriscope, thermometer, urine test strips, glucometer
  - Barouche/bed + chairs /beanbags, linen supply
  - Manuals and reference materials and suitable storage
  - Dressings, bandages and first aid provisions
  - A refrigerator with freezer compartment and/or an immunisation fridge with thermostat

- **Ongoing Resources**: Ongoing costs would be minimal after initial set up costs but would include the budgeting for:
  - Replacement medication stock, dressings, bandages etc
  - Linen costs
  - Annual checking and servicing of equipment
  - Annual rental of medical gas cylinders (if applicable)
The advent of globalisation, disease transmission, modern communities with increasing mental health issues and life-style disease such as obesity, has challenged us to be innovative and reform current practices and health policy. South Australia would benefit from school health services and a small outlay would be required for initial set up and ongoing costs. All schools in South Australia currently have an area designated for first aid, usually with access to a desk, phone and bathroom. Nurses are adaptable by nature and can provide a range of services within the existing first aid space in most cases. The equipment and supplies required would be determined based on a needs assessment of the services to be provided.

Documentation

A key role for a school nursing service is the surveillance and assessment of children and young people’s general health and wellbeing. Documentation of health information is an expectation of school nursing practice and should have clear standards and guidelines identified within the Scope of School Nursing Standards.

School questionnaires were completed in all three countries visited, to establish a base line for general health and wellbeing and the identification for specific needs. This was also an opportunistic time to validate immunisation status.

Only in the UK did we see a formal handover from Health Visitors caring for the 0-5 age group to School Nurses and the same client records being continued. Families with school-aged children are required to complete a school health questionnaire which is available through www.healthykids.co.uk at school entry and on movement in from another school. If required, and with parental consent, a school nurse will review the child or young person as per the UK’s Healthy Child Programme.

Sweden has identified that reliable school health documentation is important for portraying school children’s health and can be used as a resource for community planning. Documentation through a health assessment questionnaire included questions on psychosocial conditions.


Documentation for school health services in USA is highlighted within NASN’s mission statement (NASN 2014) and recommends electronic health records (EHRs) as a requirement for school nurses. They encourage school nurses to be involved with the choice of software required and ensure effective training. Additionally, NASN notes that school nurses should be aware of security measure to safeguard student confidentiality.
The collaborative case management for children identified with complex health needs, developmental literacy and vulnerabilities could be employed within SA. Good liaison with key health professionals who are involved with children less than 5 years supports a seamless transition into the school setting.

A clinical handover from CaFHS services, paediatricians, Child Protection Department, and allied health etc. for relevant identified children would ensure a continuation of services to promote optimum outcomes for children and young people. A formal clinical handover is suggested, and this could include provisions already in place within SA Health, e.g. clinical handover procedures. The process of this clinical handover would also safeguard our vulnerable children and young people who move in and out of areas, as school may often the only institution they attend and this would provide a valuable opportunity to address their health concerns.

Early intervention when psychosocial complexity and risks are identified can achieve the best outcomes for children and young people. Jess Streeting, a Lead Nurse for 'looked after children' in UK (equivalent to Children under The Guardianship of The Minister in SA), has devised an evidence-based individual health and wellbeing assessment model using 'Still Small Voice' (SSV) (Streeting, J 2015) assessment in a school nurse setting. This model is described as, ‘effective, adaptable, holistic and most importantly as being child and young person friendly’. The model suggests that as the school nurse role evolves, time for a full comprehensive assessment may pose to be a challenge. Simplifying the assessment offers a way to gather child-centred information quickly, in partnership with the child or young person. The child or young person can observe, correct and validate the documentation, allowing a truly transparent reflection which offers the school nurse a holistic assessment of the child or young person’s life and circumstances. The tool is unique to the individual and allows the best provision of services and care planning while keeping the child as the focus.

Similar tools could be developed in SA for a school nursing service. The genogram currently used in CaFHS is of similar description and could be adapted to make it more ‘child-friendly’.

Electronic case notes would be advantageous to consider for the provision of a school nursing service. A review of software available should be undertaken with reference to costings and safe guarding of confidential information. This would remove any concerns from storing paper documentation within a school or the transfer of records from a community setting and the space required is reduced.
Medication Management

In the 1990’s, in the public school system in Massachusetts and under the influence and direction of Anne Scheetz, MPH, RN, NEABC, a law was established to control medication administration (Sheetz, & Blum, 1998). The aim was to improve student safety outcomes and provide a high standard of care for students at school thus improving the accountability of health care provided and reducing the number of ‘near-misses’, the challenges for non-regulated health workers and the confusion surrounding medication issues. The regulations set forth specific requirements for parental consent and a medication order by a licensed prescriber. The key process involves:

1. Medication Order form
2. Parent or guardian information letter
3. Written parent or guardian consent for medication administration
4. Medication Administration plan
5. Medication Administration daily log
6. Medication Error report

This led to the development of regulations and standards for the delivery and storage of medications in school. These regulations apply to both public and private schools in Massachusetts. This revolutionary work paved the way to provide guidance to other cities and states as they address this important health care issue. In other US state public school systems, some districts have a physician employed by the district who provide orders to enable the school nurse to administer regular medication and when necessary or as required (PRN) medications. Some of the discretionary medications included are Tylenol (paracetamol), ibuprofen, antacids, Benadryl (antihistamine) and emergency Epipen (adrenaline). Some school nurses also have access to standing orders for the administration of Naloxone, necessitated as a result of the opiate epidemic. NASN provides the following guidelines on medication administration (National Association of School Nurses, 2016):

*It is the position of the National Association of School Nurses (NASN) that school districts develop written medication administration policies and procedures that focus on safe and efficient medication administration at school by a registered professional school nurse (hereinafter referred to as school nurse). Policies should include prescription and non-prescription medications, and address alternative, emergency, research medication, controlled substances, and medication doses that exceed manufacturer's guidelines. These policies shall be consistent with federal and state laws, nursing practice standards and established safe practices in accordance with evidence based information. The Individuals with Disabilities Education Act, and Section 504, mandate schools receiving federal funding to provide “required related service”, including medication administration (O’Dell, O’Hara, Kiel, & McCullough, 2007).*
In the public system in the UK and Sweden, medication administration may not be performed by the school nurse; it may be delegated to the first aid officer or classroom teacher. Care Plans specify what, when, how and who is to provide the support for direct student medical care around various medical issues such as asthma, anaphylaxis and diabetes. In both the UK and Sweden, care plans are formulated by hospital specialists, teachers, school nurses or parents. The school nurse provides training in schools to educate staff to deliver the applicable care. Independent schools employ school nurses whose role may include first aid and medication administration. It is the responsibility of the individual nurse and school to formulate appropriate guidelines to promote safety and align with their skills and scope of practice.

South Australian schools would benefit from the lessons learned in Massachusetts, recognising the reality that students in 2016 and beyond are requiring medication during the school day as part of their normal daily care and, as in any other area of health care, the provision of medication administration should be regulated and performed by qualified, accountable registered nurses to ensure client safety. This will ensure best practice by providing appropriately trained nurses, familiar with medication indications, contraindications and expected side effects, and help ensure the medication given is appropriate and beneficial. Ensuring the safety of students at school is paramount in our education system. Currently, South Australia does not have a reporting mechanism for medication issues in all schools, so the frequency of medication errors or near misses is unknown. Students regularly bring over the counter medications to school and keep it in their pockets or school bags and, sadly, it is commonplace to share medication to a friend if asked. These practices are extremely dangerous and a regulated system is required.

**School Readiness**

Inequalities in early learning and achievement begin to become obvious in early childhood, with a gap developing between the abilities of poor and affluent children as early as two or three years of age. Children who come from families with multiple risk factors (e.g. mental illness, substance misuse, debt, poor housing and domestic violence) are more likely to encounter an extent of poor health and social outcomes. These might include developmental and behavioural problems, mental illness, substance misuse, teenage parenthood, low educational attainment and offending behaviour.

The Australian Early Development Census (AEDC) can identify the needs of children, young people and families from a nationwide census and health and educational outcomes. The AEDC does this by reviewing the environment and collective experiences of children in the first five years of life.

The AEDC, 2015 results from 96.8% of five-year-old children who were registered to start school in SA identified emerging trends that 22 per cent of children in Australia are considered vulnerable on one or more of the developmental domains. This increases to 23.7 per cent of children in South Australia. The
percentage of children who show vulnerabilities of emotional maturity, physical health, social competence and wellbeing domain has increased from 9.3 per cent in 2009 to 2015 (AEDC, 2015)

School readiness is gaining popularity worldwide as a guide to closing the learning gap and increasing equity in accessing education and attaining lifelong learning so that our children and young people can achieve their full developmental potential (UNICEF 2012)

The UK’s ‘School Readiness’ is a project to improve health outcomes for some of the most vulnerable and disadvantaged children. Public Health England’s *Improving School Readiness: Creating a Better Start for London* 2015 identifies what is school readiness and its importance. It discusses the benefits of investing in school readiness and continuity of care.

![What school-ready children look like](image)

*Figure 15: PHE's 'School Ready children'*
As noted by many countries, investment in the early school years can reduce social inequalities in children’s outcomes and have a positive impact on communities.

SA should consider using AEDC data to inform the distribution of services and supports. This may identify areas where pilot sites may be best suited for the implementation of a school nursing service, e.g. sites could be identified as having similar socio-economic relationships. Data collection at a school aged entry from children with and without access to a school nurse could be collated.

**Students with Special Needs**

Baltimore County is located in the northern part of the US state of Maryland. In 1974, a federal law was passed that all children and young people with intellectual disabilities have the right to free education. In 1989, the state of Maryland established that every school would have a school nurse.

In Baltimore, the Office of Health Services provides a health service programme that supports student learning. Within this office operate the coordinator, Deborah Sommerville, RN, MPH, four school nurse supervisors (responsible for 50 schools), one health programme facilitator and one administration support person. These staff are responsible for the delivery and coordination of health services in health suites and school-based centres throughout Baltimore.
The care provided by the school nurses contributes greatly to the educational success of every student. This allows students to meet or exceed their Individual Education Plan (IEP) goals and maximise all opportunities for fostering the development of independence in their adult life. School nurses also assist to create a safe environment for the students to engage with the curriculum and develop life skills relevant to the needs of each child.

In the UK, Oxford Health School Nursing Service is made up of teams who work with children, young people and families. The school nurses are qualified nurses who have undertaken specialised training in the health of children and young people. Debra Parkhurst is Manager Young Carers, Oxfordshire County Council and provides services for students with special needs: the young carers. A young carer is considered to be someone under the age of 18 years who may physically or emotionally be caring for someone in their family because of an illness or disability. As a service, Young Carers Oxfordshire works with children 0-25 years, the youngest being 3 years of age, to meet the educational and emotional needs of these young carers. The Oxfordshire Young Carers Service works with schools, professionals and services to support young carers and their families. The young carers programme offers supported signposting: this means not just informing them of a service but also physically making the appointments for them and taking or accompanying them to the appointment. There are an estimated two young carers in every classroom.

Census national data 2013 (England) showed 166,363 young carers compared to 139,000 in 2001 with 23,000 of these aged less than 9 years of age. This is still thought to be an under-representation of the true picture as many remain under the radar of professionals. The document ‘Hidden from view: The experiences of young carers in England 2013’ from the Children’s Society identifies data and analysis of young carers and outlines the impact of caring on educational outcomes and employment opportunities. Young carers face disadvantages, which not only affect their childhood and education, but also affect
their futures prospects. Locally, 10% of the 5-19 year olds are young carers, 32.2% are caring for a parent with a mental health disorder and 19% needed to see a medical practitioner immediately.

Impacts on young carers include: stress, self-harm, eating disorders, risk-taking behaviours.

- 26% are overweight - above the 90th percentile
- 19% needed advice to seek medical practitioner support
- 5% required urgent children’s mental health services (be seen within the week)
- 50% presented with risk factors for own mental health wellbeing or self-harm
- 44.9% needed dental care
- 50% needed education regarding healthy diet
- 8.6% were bullied
- Incontinence, insomnia are examples of other identified issues

School nurses are perfectly placed to utilise embedded, proven screening processes to additionally screen and identify young carers. It is important to note that 38% of all referrals to The Young Carers Service were through school nurses and 50% of young carers were unknown to any other services.

Data collection is an important element and enables the ability to identify families with adults with mental health issues and/or families with a disability within the family unit. This provides an indication that a child may have some level of caring role.

Legislative changes have included The Social Care Act 2012 and Children and Family Act 2014. Authorities were required to make significant changes to their provision for young carers over the past 18 months. There is now a statutory duty to provide:

- A Young Carers Needs Assessment and support plan under the Children and Families Act 2014.
- A Young Carers Transition Assessment and support plan for young people aged 14-19 years – under the Care Act 2014. Consideration needs to be given to the transition from childhood to adulthood.
- Whole Family Approaches to work across Adult and Children’s Services - under the Care Act 2014.

From April 2015, young carers have a statutory right to request an assessment of their needs linked to the Children’s Act and be seen as a child in need. Since this legislation there has been an 81% increase in assessments as there is no threshold for when an assessment is required. The transition assessments enable adult and children’s services to work together.
In Vallentuna, Sweden, Optimus School has a significant focus on refugees and immigration as the school provides a bridging education for non-Swedish students in preparation for mainstream school. Students can stay for three weeks to a year. Students enrolled are either legal immigrants or refugees and are encouraged to start school as soon as possible. The majority are teenage boys who have fled their country's war-torn regions and often arrive without any family. Some refugees are provided with social housing, where they might share accommodation with 6-8 others and are required to buy their own food and cook their own meals. Some are placed in institutions and some, if under 12 years old, are placed with families. Children without a family are assigned a caseworker to act as a parent until they are 18 years old.

Optimus School’s school nurse, Susanna Sindemark, and the school principal meet with each student on their enrolment at school. The nurse conducts health screenings: height, weight, vision, hearing and scoliosis checks, etc and provides immunisations. The nurse also makes arrangements for the student to visit the doctor for further tests and investigations, such as hepatitis and HIV screening, the provision of prescription medication (if required), or referral to a psychologist (where necessary). Most of these services require a translator. Most lessons are in Swedish but a few lessons are taught in their own language in order to maintain their personal identity. Music lessons, technical studies and gymnastics are offered also. Students often find it extremely difficult to socialise so the community takes some responsibility through community sport connections. School can be difficult for some students, as they may previously have never attended school. There are no social workers or counsellors employed at this school: the focus is on education, nutrition and accommodation and a new future. Most students are not ready to talk about what they have seen and been through so counselling is deferred until the need arises.

South Australia would benefit from a school nursing system of care with provisions for providing holistic student health interviews, screening and immunisation checks, with the ability to record data to provide governments with the information necessary to plan for future needs. Currently, South Australia does not have school nursing services which could provide all students, including those with special needs, valuable support with the capacity to link students and families to specific health services. Best practice would allow supportive signposting following the identification of groups such as young carers, refugees, migrant children and children with physical and emotional disabilities.
Summary Comparison of School Nursing Models in South Australia, USA, UK and Sweden

South Australia

Within South Australia (SA) there are currently a range of excellent school nursing services being offered within several independent schools for children and young people. These services however are fragmented and each school interprets the role of the school nurse differently.

The current service provision of school nurses in SA identifies some great examples of practice:

- Undertaking health needs assessments and care planning, not only for children and young people within their schools but often with the school staff and even the community itself, targeting services to meet those identified needs

- Providing health education to young people in the classroom on topics, eg: puberty and growing, sexual health and contraception, smoking, alcohol and drugs, healthy eating and healthy lifestyle choices, mental health and well-being, dental health, emergency first aid

- Participation in health fairs, talks to parents and providing education for teachers on health related topics as well as being involved in individual and group focused work with pupils

- Delivery of nursing care at a senior first aid response and health provision for complex medical needs

- Multi-agency drop-in clinics, school liaison groups, parents evenings/sessions

United States of America

In United States of America (USA) the school nursing service is seen as a central role in connecting health care and education for children and young people 5-19 years.

The National Association of School Nurses (NASN) has a recommendation, “That every child has access all day, every day to a full time registered professional school nurse” (NASN 2016)

The role involves the school nurse having responsibility for all students within the school community. The school nurse takes a leadership role in operating as the coordinator of all school health programmes. This includes the provision of health education and health promotion e.g. prevention of teen pregnancy, sexually transmitted diseases, tobacco, alcohol and substance use to children, young people, families
and staff. The role also includes the management and interventions for illness and injury and the administration of medications on a regular basis to pupils.

![Diagram showing different aspects of school health.](image)

*Figure 17: A coordinated School Health Programme (reproduced with kind permission from Department of Public Health’s School Health Unit, Boston)*

Health assessments and participation in the development of individualised plans for students with complex health needs are undertaken along with the delivery of nursing procedures such as gastrostomy tube feeds, tracheostomy care, and catheterisation.

The school nurse in USA is involved in recommending health programmes and guidelines for school district health policies and serving as a health care provider liaison between the school and community. Within USA it is mandated that all pupils at school are immunised: the immunisation status of children and young people is seen as part of the role.

The requirements for a school nurse in USA differ from state to state. In general a school nurse is a Registered Nurse from the State Board of Nursing and will often have a Certified School Nurse qualification. In some states a Master’s Degree in School Nursing is a requirement.

NASN recommends that all school nurses have a minimum of a Batchelor’s degree and achieve School Nurse Certification. In some schools, where they have Wellness Centres, a Nurse Practitioner level of education is required.
**United Kingdom**

School nurses in United Kingdom (UK) are qualified nurses who hold an additional specialist public health qualification, which is recordable with the Nursing and Midwifery Council. The school nurse co-ordinates and delivers public health interventions for school-aged children 5-19 years. School nurses are specifically trained and skilled to deliver public health with a whole systems approach to support school-aged children and their families through the delivery of integrated pathways.

In England they are recognised as the lead profession for coordination and delivery of The Healthy Child Programme (HCP) (DOH UK 2009) Delivery of evidence based programmes, such as the HCP is part of the public health role of school nurses in the UK. They provide health promotion advice, screening and surveillance, engagement in health education programmes and public health interventions to identified priority groups e.g. teen pregnancy, sexual health, substance misuse prevention, obesity. School nurses in the UK are strengthened by a team of registered nurses, nursery nurses and support workers. They play a significant role in safe guarding children and young people who face adversities and work in partnership with local authorities, children’s social care, police, probation, youth offending services and voluntary and community services.

Every school in the UK has a named School Nurse. The school nurse, on average, covers one secondary school with 3-4 primary schools. In Oxford, this is one school nurse per school. The provision of a school nurse to all schools allows all children and young people to have access to health support. School nurses often work from a community based clinic as opposed to a school setting.

*Figure 18: School Nursing Brochure for students and parents, London UK*
As recent as November 2016, the UK has updated a service delivery model for school nurses offering role clarity. This model is called the 4-5-6 approach for school nursing, 5-19 years (IHV 2016) and is shown below.

![Diagram of the 4-5-6 Model for school nursing, 5-19 years]

*Figure 19: 4-5-6 Model for school nursing, 5-19 years*

**Sweden**

The school nurse in Sweden works within the school on the promotion of student health and the Swedish Association of School Nurses recommends 400 pupils per full time school nurse.

Currently in Sweden all students have access to a school nurse, school physician, social worker and psychologist within a school health team. The school health team are guided by national guidelines.

The municipalities have the responsibility for the school health team with the school nurse carrying out the child health programme together with school physician. School nurses commonly have a consulting room located in school and work close to the pupils. This gives them the opportunity to monitor, assist and promote health as well as collaborate with other school staff.

School health care in Sweden requires regular checks of all children and young people from the age of 6 years until they are 19–20 years old. The role of school nurses includes health checks, immunisations, health education in class rooms, eg: about puberty and relationships.

It is important to note, with the countries visited, there was no observation of provision for Aboriginal and Indigenous populations or rural and remote areas. Developing School Nursing within these areas would require a state wide consultation with, wise and senior members of our Aboriginal communities to respect cultural competency.
Recommendations for a South Australian Sustainable School Nursing Model

Please Note: Recommendations are not intended to duplicate current service provisions, such as school based immunisation programmes and support provided by the Access Program

Principal framework would include:

- Federal and State Governance
  - Legislation to incorporate school Nurses into all SA schools
- Departmental Governance and Direction – Nursing Director
  - Policy, Regulations, Scope of Practice, Organisational Structure
- Clinical Lead/ Supervision
  - Clinical Supervision, Standards, Educational Framework
- School Nurse

Translated into a diagram the framework could be as follows:
### Clinical Framework inclusions:

<table>
<thead>
<tr>
<th>Role Description</th>
<th>RN 3 Clinical Lead for School Nurses Providing Clinical Leadership for staff within 4-5 schools (A cluster)</th>
<th>RN 2 School Nurse 1 per 400 students with provision for variations due to higher health needs. Extra staff RN1/ EN for larger schools</th>
</tr>
</thead>
</table>
|                  | Diploma in School Nursing with option to extend to MSN (During roll out period - working towards) | RN: working towards Diploma in School Nursing with option to extend to MSN  
EN: Diploma of Nursing Div 2 Nursing (medication management)  
Pre-requisites: Senior First Aid and Child Safe Environment |
|                  | Diploma in School nursing to include:  
• Sexual health  
• Leadership  
• Immunisation  
• Child Safe Environment  
• Communicable Disease Management.  
• Senior First Aid/Triage Skills  
• Partnership Training  
• Mental Health to include: cyber bullying/ sexting  
• Attachment Theory | Staff to complete 1 week intensive orientation training prior to commencement which will include:  
**Governance**  
- Standards and procedures  
- Surveillance  
- Documentation  
- Data collection  
- Referral pathways  
**Health promotion**  
- Sexual health  
- Communicable disease  
- Mental health  
- Immunisation  
**Triage Introduction** |
|                  | • Partnership working with staff, children, young people, parents and multi-disciplinary teams  
• Provide services that are culturally sensitive to the needs of consumers  
• Support referrals to appropriate agencies using guided referral pathways  
• Lead the school nursing team to reshape the service by planning services that are co-ordinated with other disciplines or agencies to meet health care needs  
• The provision of expert clinical knowledge and or interventions for children and young people and their families through the application of professional standards and adherence to policies, protocols and procedures and working within a model of client centred care  
• Being available to participate in | • Partnership working with staff, pupils, parents and multi-disciplinary teams  
• Provide services that are culturally sensitive to the needs of consumers  
• Referrals to appropriate agencies using guided referral pathways  
• Undertake health needs assessments and devise individual care plans for children and young people as required  
• The provision of expert clinical knowledge and or interventions for children and young people and their families through the application of professional standards and adherence to policies, protocols and procedures and working within a model of client centred care  
• Being available to participate in |
- Lead a skill mix team
- Spend time in schools (particularly where more vulnerabilities have been identified) and provide clinical supervision for children and young people with more complex medical and health needs
- Use research and utilise evidence based practice to develop clear standardised guidelines and standards
- Gather data within the school and communities to target public health interventions and reduce inequalities in health
- Work at a senior level with education staff within schools to determine health promotion lesson plans within curriculum with topics to commonly include:
  - Puberty and growing
  - Sexual health and contraception
  - Smoking
  - Alcohol and drugs
  - Healthy eating and healthy lifestyle choices
  - Mental health and well-being
  - Dental health
  - Hand washing
- Provide clinical leadership to staff working in schools
- Supervise the undertaking of health needs assessments and devise individual care plans for children and young people as required
- Working hours 8 hours, Mon-Fri, 0830-1700 year round
- Participate in working groups related to the school nursing service e.g. protocols and clinical policies
- School profiling and community assessment by analysing data generated to determine local needs and inform the neighbourhood health profiles
- Strategic role-assessment, planning, evaluation of services provided
- Clinical Lead for a defined school cluster

- Community health presentations, talks to parents and providing education for teachers on health-related topics
- Home visiting to families as required and governed by policies and procedures
- Work with and support all staff working with the young person e.g. Psychologists, Speech Therapists, Families SA
- Public health role/education in the classrooms with topics to commonly include:
  - Puberty and development
  - Sexual health and contraception
  - Smoking
  - Alcohol and drugs
  - Healthy eating and healthy lifestyle choices
  - Mental health and well-being
  - Dental health
  - Hand washing
- Contribute to SMS/ Web page 0830-1600 with 24hr response time, no weekends.
- Attend Multi-Disciplinary meetings when required
- Provide Sexual Health sign posting e.g. pregnancy testing, sexually transmitted infection testing and contraception
- In house staff training on anaphylaxis/CPR/Asthma
- Surveillance/ screening for children and young people: Kindy/reception/Yr5,Yr8, Yr11-CAFHS to continue with kindy screening
- Access to review child’s immunisation status & refer as needed
- Support seasonal immunisation/public health outbreak e.g. H1N1
- Working hours 8 hrs, Mon-Fri, 0830-1600 term time + 2 weeks
- Response to medication management in schools
- Support first aid e.g. epilepsy, diabetes, asthma etc.
- Review absences e.g. Skype call for remote areas
- Community health promotion as identified from collated data
Clinical leadership role and involvement with SMS/Web page 0830-1600 with 24hr response time, no weekends
Create networks and develop partnerships with other agencies to give a more collaborative approach to children and young people
Develop and lead programmes around parenting skills if required within the school community
In partnership with RN 2 and Nursing Director provide an annual report for policy makers which details summaries of public health activities that are meeting the key public health priorities as identified in SA’s government plans and provide the data collected from the school nursing role
 Provision of clinical supervision/case reflection
Keeping professionally up to date with research and nursing/midwifery technological advances
Keeping up to date with professional standards of practice, implementing and monitoring evidence based practice and quality management initiatives consistent with organisational policies
Dealing appropriately and relevantly with children, young people, families and staff where there are multiple complexities, diverse cultural backgrounds and expectations of clients
Supporting immunisations
Facilitate Performance Review’s and Developments (PRD’s) for staff

Liaise with hospital Emergency Department staff
Collect data on school population as identified
Have a relief/casual pool of staff
Option of attending camps/excursions for high complex medical needs if not with SA’s Access Programme
Listen to children’s voices
IT skills/documentation/clear communication
Be named School Nurse for a defined school and/or school cluster
Offer appointments within health room in school for health needs
Contribute to the development of the school profile
Participate in working groups related to the service, e.g. pathways, protocols and clinical policies
Keeping professionally up to date with research and nursing/midwifery technological advances
Keeping up to date with professional standards of practice, implementing and monitoring evidence based practice and quality management initiatives consistent with organisational policies

Key Service Requirements
Robust data collection and analysis to determine the collective health needs of the school and community
Specific health needs identified from Child and Family Health Service (CaFHS) and a transparent clinical handover by face to face meeting and written referral form to staff involved
- Case notes to follow child/young person to ensure all information provided
- Regular reviews with multi agencies to develop and evaluate appropriate individual health care plans
- Identify SA’s Public Health priorities and achievement of meaningful health and wellbeing outcomes within schools:
  - Improved school attendance
  - Improved educational attainment
  - Reduce childhood obesity
  - Improved oral health
  - Reduced teenage pregnancy rates
  - Reduced ambulance call outs and attendance to emergency departments
Implications for South Australia

Within the SA Independent Schools with school nurses, no income (government funding or parent contributions) is received specifically for the School Nursing Service provided. Funding, in line with the National Disability Insurance Scheme NDIS, is provided for students with disabilities and services are generally delivered by teaching or teaching support staff. These Independent Schools have made a commitment to allocate funds, beyond the basic requirement of a first aid officer, to provide school nursing services to address the additional needs of their students, including:

1. Maximise learning outcomes/opportunities for all students including those with health issues
2. Provide higher levels of emergency first aid and health care
3. Delivery of specialist health education
4. Preventative and primary child health care
5. Aid with reducing absenteeism (directly linked to academic performance)

The budgetary allocation made by these schools, is an investment into school nursing and comes at the expense of other desirable additional functions of the school. These school nursing models have the support and commitment of the school’s Principal and Board. Given that the school Board is obligated to prioritise the provision of education services for which they are state and federally funded, without the broader implementation of a community/council/state/commonwealth funded school nursing program, ongoing development and maintenance of these nursing services cannot be guaranteed into the future.

During our time in school nursing, we have witnessed an increase in the number of school nurses and their required service provision in non-government schools. Unfortunately, while each individual school recognises increasing needs and is providing valuable services, the full benefit is not being realised for each individual school, or the broader health service, because they are all fundamentally independent.

Critical to determining viability of a School Nursing Program, is establishing costs and benefits. A detailed summary of the actual budgetary expenditure of school nursing programs across the USA, UK & Sweden would not be an effective process due to variations in health funding, the costs to deliver services in each location and exchange rate variables.
Implementation:

The development of school nursing has been a major focus for the study tour group. However, SASNA is currently limited in its resource and authority to enact change in and of itself and similarly, in our capacity as School Nurses, we have no authority to enact change through the state education and health systems. The ongoing aim of this study tour enables us to implement new learnings centred on the continuing advocacy of implementing a School Nursing Program in SA. This advocacy involves the stakeholders listed within this report and those who have the authority to enact change.

The learnings listed below involve ongoing conversations, collaboration and the transferring of these key learnings from the study tour.

Current stakeholders and networks include:

- Ministerial Advisors: Blair Boyer Deputy Chief of Staff Office of the Premier, David Pearson Senior Advisor Office of the Premier, Jennifer Rankine Member of the South Australian House of Assembly, Annabel Digance MP Member for Elder,
- Change@SA Project Consultants: Gess Carbone,
- SA Health: Adj Assoc Prof Lydia Dennett Chief Nurse and Midwifery Officer, Debra Pratt Principal Nursing & Midwifery Adviser,
- DECD: Ann-Marie Hayes Executive Director, Statewide Services and Child Development Office for Education and Early Childhood Department for Education and Child Development,
- Association of Independent Schools of SA (AISSA) Carolyn Grantskalns Chief Executive
- Representatives of the Catholic Education Office
- Independent School Communities
- South Australian School Nursing Association SASNA,
- AMNF (SA Branch) Specialty Reference Groups,
- School Nurse Associations both Australian and International,
- Nursing Program Directors at Adelaide University, Flinders University and University of SA,

Ongoing investigation into networking opportunities will provide additional platforms to share findings from this study tour.
Summary of Learnings and Actions

The study tour investigations have reinforced the benefits of a state-wide understanding of the school nurse scope of practice, with leadership, community/public health, care coordination, and quality improvement being key focus points. The school nurse has an important public health leadership role and is an integral part of the high intensity multi-agency service provision for children, young people and families. The school nurse provides a central, pivotal role within service provision which strategically positions them to deliver “the right care by the right professional at the right time and the right place”. Investigations have also identified that an effective, sustainable school nursing model would be significantly enhanced through Federal and State Government support, Department of Health and Education governance and clinical leadership/supervision.

**Action:** These learnings will inform stakeholders of the scope of school nursing practice and help shape the future health care provision for 5-19 year old’s. Conversations with stakeholders regarding sustainable governing structures and the development of standards for practice, professional accountability, credentialing, education, regulations, guidelines, policies and clinical supervision will be key to the future of school nursing in SA.

Data collection is vital in the quality improvement, continuous and systematic process that leads to measurable improvements and outcomes directing change. Currently, SA school nurses have limited access to data targeting the health needs of our 5-19 year old’s. Technology has an important role in the collection of data.

**Action:** Observations regarding the use of effective data collection to direct service provision and technology to strengthen service provision will be further discussed with SA universities and research specialists regarding opportunities for change.

As a direct outcome from the study tour objectives, a proposed School Nursing Model structure was drafted. This draft includes Director oversight, Clinical Leadership RN3, School Nurse Lead RN2, extra required nursing staff RN1/EN. International recommendations are for 1 School Nurse to 400 students.

**Action:** Future school nursing models will be discussed and considered through stakeholder conversation regarding the future of school nursing in SA.

Given that Independent School Boards are obligated to prioritise the provision of education services for which they are state and federally funded, without a broader implementation of community/council/state/commonwealth funding, current non-government school nursing programs cannot be guaranteed into the future.
**Action:** Consideration and consultation with stakeholders to determine cost benefit solutions. Learnings from this study tour will be presented to stakeholders for consideration and exploration to ensure the future of school nursing in SA.

International executive health personnel warn that school age children will put further drain on health care systems and society for generations to come, if radical transforming health programs are not implemented. It is important to note that 89% of school nursing program simulation trials in the USA, resulted in a net cost benefit. The school nurse is an evidenced investment in universally reducing attendances to emergency departments or General Practitioners, providing an immediate economic benefit to health budgets.

**Action:** The study tour group intend to investigate opportunities to determine the cost benefits of primary, preventative and public health roles within SA schools.

Sound advice provided by international colleagues highlighted the importance of the pursuit of legislation and law to ensure that future governments cannot overturn the essential work a current government achieves in regards to health reforms for 5-19yrs old’s.

**Action:** The pursuit of legislation will be done in consultation with members of parliament, SA Health and DECD.

Currently SA school nurses have no formal opportunities for clinical supervision or reflective practice with a clinical lead or peers. The need for clinical supervision for school nurses within SA is confirmed as essential through the study tour findings.

**Action:** Clinical supervision directives will be further discussed with SA school nurses through SASNA and explored through stakeholder recommendations.

National School Nursing Professional Practice Standards are available to SA school nurses and endorsed nationally by the ANMF. Findings support that clinical consistency will be achieved through the development of clinical guidelines for SA school nurses. CPD specifically targeted for school nurses addressing the diverse and autonomous nature of the role is a key element to maintaining a highly skilled school nursing workforce.

**Action:** Further exploration of clinical practice guidelines will be discussed with DECD and SA Health in consultation with SASNA. Ongoing development of targeted CPD will be explored through SASNA, ANMF and Community Nursing Services.

The need for a school nursing specialist higher education qualification, was confirmed repeatedly throughout the study tour.

**Action:** The identified need for the development of school nursing specialist training will be further explored with the ANMF, and South Australian universities.
Recommendations - Summary

**Consultation**

1. Undertake consultation with Ann-Marie Hayes, Executive Director, Statewide Services and Child Development, Statewide Services and Child Development Division Office for Education and Early Childhood, Department for Education and Child Development and Mel Bradley, Interim Director, Child and Family Health Service, Women's and Children's Health Network, SA Health, Government of South Australia regarding the key findings and recommendations of this report and to discuss further direction on implementing a school nursing service within South Australia’s public schools
2. Work with South Australia’s epidemiologist, Associate Professor Sally Brinkman to source and consider Children’s Centres as pilot sites; review data collection on health status indicators of chronic illness and conditions e.g. asthma and diabetes and allergies
3. Discussion with Sacha Gower, Senior Project Officer, Statewide Services and Child Development Division Office to consider the strategic involvement required at piloting a school nursing service in South Australia’s Children’s Centre’s
4. Continue discussions with other stakeholders, as identified in the report

**Funding**

5. Consider options for funding including specific grants or research opportunities in collaboration with universities, this could particularly work well with technological innovations.

**Policy and service level**

6. Provide governments with key findings and recommendations from this report to establish a ministerial group to oversee the initiative and consider the introduction of a law to protect the services for our children and young people
7. Develop a task force for additional research on a preferred model of school nursing
8. Identify key partners in a school nursing service to work in collaboration and develop a steering group. The steering group to include a clear vision statement with goals that include desired changes and objectives and to include cultural awareness
9. Consultations with parents and young people to determine their views on services that are required within the school setting for health. Include surveys to education staff that are currently providing high level first aid in schools. Consultations with Allan Ball, Manager, Consumer and Community Engagement, SA Health to involve Youth Forums
10. Develop a leadership team for the standardisation of clinical standards for care and service provision. The leadership team to review the continuation of care from Child and Family Health Services and other 0-5 year’s services to a school nurse service before school entry, to prepare and plan for appropriate management and care of our vulnerable young people. The leadership team to consider cultural awareness

11. Liaise with school nurses in remote and rural areas of Australia for evidence based models of school nursing

**Service data and mapping**

12. Consider the workforce within SA that would currently have a required qualification for school nursing before implementing a service with no current qualification provision from SA’s universities

13. Consider local projects from community health needs assessments, school profiling and current evident trends e.g. from learnings within UK of specific programmes: Female Genital Mutilation (FGM), Sexual Exploitation and Young Carers programmes

14. A review of current and previous pilot/school nursing models in Australia with particular focus on Tasmania. The Tasmanian government piloted a school nursing service in 2012 and this year (2016) they have introduced more school nurses, with a long term plan that will result in 20 registered nurses working in schools by July 2017, supporting the health needs and education of students

15. Map services already provided within the community, including service delivery for immunisations and the provision for high complex medical needs to our children and young people in schools. A discussion with South Australia’s current Access Programme for a partnership approach and prevention of a duplication of service provision

16. Liaise closely with universities for options of developing a school nursing qualification either through the development of a certificate based course or diploma
Conclusion

The school years of a child are when the first health behaviours are formed. Children and young people spend more time in schools than in any other environment outside of their homes. The health care of these children will affect their education potential, future outcomes and their potential need for future health support; which in-turn will place pressure on health systems, social security and government supported systems. By accentuating school health and wellness, governments can support schools to accomplish life changing goals: closing the achievement gap by improving literacy and educational outcomes for all students.

School health and wellness is more than attending to first aid and health education in classrooms. Quality health care provision in schools must be considered as a foundational influence on improving developmental vulnerabilities for our most vulnerable children and young people.

Targeting the ‘right care at the right time and in the right place first time’ (South Australia Department of Health, Statewide Service Strategy Division, November 2009) for our children and young people, through the professional expertise of a school nursing service, could potentially change the trajectory of the ever-increasing pressure on our South Australian health care system.

The six principles of ‘Transforming Health’ (Department for Health and Ageing, Government of South Australia, October 2014) are to provide care that is:

1. Patient centred
2. Safe
3. Effective
4. Accessible
5. Efficient
6. Equitable

A school-nursing model of care is an innovative vision of providing quality health care, ‘best care, first time, every time’ (Department for Health and Ageing, Government of South Australia, October 2014). Under the foundation of “Transforming Health,” South Australia could lead the nation in the delivery of service provision for the generations of our future.

Promoting health and wellness in schools will require leadership and commitment at many levels, from classrooms to national policy makers.

Further consultation is required with our Aboriginal and Indigenous leaders for a cultural response to provide a service that is safe and accessible and values cultural needs. A review of any school nursing
provisions currently being provided within Australia; including our Aboriginal and Indigenous school aged populations; and our rural and remote areas is recommended to provide further evidence based for implementation.

We need to advocate for all children and young people that they too should have access to a school nurse: a school nursing service that is equitable and standardised for all children and young people regardless of class or wealth.

South Australia can be very proud of the School Nurses currently practicing within our state. Despite limited support and recognition these nurses continue to advocate for SA children and adolescents.
Appendix 1: Dates and Sites/Individuals Visited

03/10/2016 Henry St Settlement: birthplace of School Nursing in the USA, 265 Henry St, New York

04/10/16 Maureen A. Linehan, RN, NCSN, NYSAN, School Nurse, The Browning School, New York

05/10/16 Dr. Laura Jannone, EdD, RN, NJ-CSN, FNASN, Assoc Prof/Graduate Faculty, Co-ordinator School Nurse Program, Monmouth University and Giuseppina Diamante, MS, CSN, Head Nurse, Neptune Township School District.

06/10/16 Dr. Laura Jannone, EdD, RN, NJ-CSN, FNASN, Assoc Prof/Graduate Faculty, Co-ordinator School Nurse Program, Monmouth University plus the Dean and Executive team Monmouth University, President New Jersey School Nurses Organisation (NJSNO), School Nursing Students Monmouth University.

07/10/16 Nancy Manzo-Mattucci, RN MSN, Baltimore County Public Schools Supervisor and President of the State Association of Maryland; Deborah C. Somerville, RN, MPH, Co-ordinator, Office of Health Services, Baltimore County Public Schools, Towson, MD; Kathryn Russell, RN, MPH, School Nursing Supervisor

10/10/16 Dr Erin D. Maughan, Director of Research, RWJF Exec Nurse Fellow NASN; Donna J. Mazyck, MS, RN, NCSN Dir NASN; NASN Leaders: National Association of School Nurses (NASN) Headquarters

11/10/16 Anne Sheetz, School Health Unit, Bureau of Community Health, Massachusetts Department of Public Health (MDPH); Mary Ann Gapinski, MSN, RN, NCSN, Director of School Health, Massachusetts Department of Public Health; MDPH Directors, Leaders and School Health Collaborators

12/10/16 Mary Ann Gapinski, MSN, RN, NCSN, Director of School Health, Massachusetts Department of Public Health; Visit National Association of State School Nurse Consultants, Boston Public Health Offices; Josiah Quincy Elementary School, Boston; Blackstone Innovation Elementary School, Boston; Quincy High School and MA School Nurse Organisation

13/10/16 Jean Afzali, Regional Consultant for School Nurses, School Leader, Boston, Massachusetts; School Nurse Leadership Forum, Holiday Inn, Marlborough: Mary Ann Gapinski, Beverly Heinze-Lacey, Laurie Melchionda, Jeanne Clancy, Therese Blain, Rita Casper, Karen Jarvis-Vance and Cathy Riccio.

14/10/16 (Denise McDonald) Rhona Cameron, Development Nurse for School Nursing; Diane Drummond, Staff Nurse for schools; Margot Wilson, Nursing Assistant for schools; Carolyn Park, working in schools with children with autism, NHS Forth Valley, Stirlingshire
17/10/16 Wendy Nicholson, Lead Nurse Chief Nurse Directorate, Wellington House, London; Public Health England: Chief Nurse Professor Viv Bennett, DH, Director of Nursing/Government’s Principal Advisor on Public Health Nursing, Public Health England; Caroline Palmer, Digital Clinical Lead; Sharon Ashley, Director Makewaves; Sharon White, OBE, RGN, BSc (Hons), SCM, SCPHN, Professional Officer for School and Public Health Nurses Association (SAPHNA); Maggie Clarke, RN; BSc (Hons), SCPHN, Queen’s Nurse (QN), Assistant Director for the Healthy Child Programme, Compass; Batool Shillingford, Young people representative British Youth Council; Nicky Brown, Public Health Specialist, PHE; Jane Levers, School Nurse Advisor for Public Health England, and Jess Streeting, MA, BSc (Hons), QN.

18/10/16 Jess Streeting, MA, BSc (Hons), QN, Soho Centre for Health, London and Health Care Team: Leaders, Managers and Allied Services

19/10/16 (Anna Thomson, Petria McCallum) Nick Medforth BA MSc, Senior Lecturer in Child Health and Care, Associate Dean (Quality Enhancement and Improvement), Faculty of Education, Health and Community, Liverpool John Moores University (LJMU); Gillian Turner RGN, RSCN, BSc (Hons), SCPHN (SN), PGCE, MSc, FHEA, Senior Lecturer, Programme Leader - Specialist Community Public Health Nursing, School of Nursing and Allied Health, LJMU; Sean Mackay RGN, BNurs(Hon), SCPHN(HV), PGCE, MHSc, Programme Leader: Primary Care, International Lead, School of Nursing and Allied Health, LJMU; Annette James, Head of Children's Public Health, Public Health Strategic Lead at Liverpool Primary Care Trust, Liverpool Primary Care Trust, Liverpool and current School Nurses undergoing the SCPHN training course at LJMU

20/10/16 Deborah Parkhurst, Young Carers Manager, Oxfordshire County Council; Oxford Health School Nursing Service: Claire James, RN, MSN, Area Team Leader; Margaret Fallon, RN, MSN, Operational Manager; Tiki Harold, RN, MSN, School Nurse and Community Practice Teacher

21/10/16 Prof Eva Clausson, University lecturer, PhD, School of Health and Society, Kristianstad University and Hanna Peciulis, BSc in Nursing.

24/10/16 Carina Halmearo, Strangnas School Nurse, Europaskolan Rogge Grundskola Strängnäs and Europaskolan Malma Grundskola Malmköping

25/10/16 Carina Halmearo, Strangnas networking

26/10/16 Karina Karlsson, Chief Operations Rc Student Health, School Health and Youth Clinic, Vallentuna Region; Susanna Sindemark, RN, CertSN and Marie Nordstrom, RN, CertSN, Vallentuna Gymnasium Gymnasievägen, Bällstabergrsskolan Fritidhem and Head Office
Appendix 2: References:


BUCMECNE: Boston University School of Medicine Continuing Medical Education/Continuing Nursing Education 2016, School Health Institute for Education and Leadership Development (SHIELD), Boston, accessed 9th November 2016 <http://bucme.org/node/1045>.


<http://www.henrystreet.org/>


<http://librarian.net/navon/paper/Chapter_1_NEW_DIMENSIONS_OF_SCHOOL_HEALTH.pdf?paperid=11177702>.


Appendix 3: Professional Reflections/Diary of places visited

Available on request