Elective report.

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Describe a pattern of disease or illness within the population with which you will be working and its issues in the context of public health.

In my experience of orthopaedic surgery in the UK both at home in Somerset and in London (where I was attached to a Consultant with in interest in paediatric orthopaedics) I had heard of and read about but not seen a patient with a Slipped Upper Femoral Epiphysis (SUFE). As a disorder it is supposed to be relatively common (1-10/100,000 children) and tends to affect those between the ages of 11-15, being more common in boys (2:1). The major risk factor for development of a SUFE is obesity. The case that inspired me to explore this issue further was that of a 13 year old child with a SUFE who weighed 95kg. Talking to both the surgical team and anaesthetic team it was clear that the surgery was higher risk owing to the child's weight. Even though my previous placement was in a large orthopaedic centre I had not seen a case of a SUFE. During my elective I saw three patients with a SUFE within a fortnight. When I brought this up to the team I was with in theatre, they said that it was something they saw relatively regularly, which also piqued my interest; as in many ways the case load was similar here to that which I had experienced in the UK. In both the literature (Nelson textbook of Paediatrics) and the surgical team's experience, ethnicity plays a part in the prevalence of SUFEs, the disorder being more common in patients of Polynesian origin.

The most major public health issue that springs to mind is that of childhood obesity. According to the Minitry of Health, childhood obesity is a growing problem in New Zealand. In 2006-7 8% of children (2-14years old) were classed as obese. The most recent statistics state that this has risen to 11% of children in the general population being classed as obese. When the statistics are further examined for any ethnic bias, the trend is striking: 19% Maori and 27% Pacific Island origin children are obese, which may account for the higher number of cases seen in patients of these ethnic backgrounds. The long term sequelae of childhood obesity are myriad. Obese children are at higher risk of being obese adults, with the associated problems such as a higher risk of cardiovascular disease, hypercholesterolaemia and metabolic syndrome. They also face problems in the shorter term. Type 2 diabetes was previously considered a problem affecting older adults, however it's incidence is increasing in children. Other serious risks posed to children's health by obesity include: early puberty, eating disorders, skin infections and respiratory problems. The psychological effects of obesity on the child also cannot be understated. They are more likely to be the victims of bullying aomgst their peer group and commonly suffer from low self esteem, anxiety and even clinical depression, all of which have a profoundly negative impact on their quality of life. Additionally, the protective effects of exercise, outlined by the Exercise is Medicine initiative in the USA, are many and varied which inactive obese children miss out on by virtue of their lifestyle.

It is clear that obesity is a major health determinant in itself, however when one considers that children with unhealthy eating habits are likely to carry these habits into adulthood and thus risk passing these onto their own children, perpetuating the problem. When viewed in this context it becomes apparent that the legacy of the increase in rates of childhood obesity could be a huge disease burden (e.g. cardiovascular disease, muskuloskeletal disorders, respiratory disease) in both the short and long term, which eventually could place a great strain on the New Zealand healthcare system.

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Describe the pattern of health provision in relation to the country in which you will be working and contrast this with other countries or the UK.

The healthcare system in New Zealand from what I have seen appears to be a well oiled machine. Patients at Southland Hospital are cared for in a pleasant environment, free from over crowding. Even the ward in the midst of a bed crisis was a less stressful place to be than many of the hospital wards I have visited as a student in the UK. The hospital itself covers a huge geographical area on the South Island of NZ, compared with the hospitals I have been placed in in London, which cover small areas in terms of square miles, but in a very densely populated area so the patient population is higher. Also the population within the area are very different demographically so the demand for services is different here from what would be high demand services in London. Elderly care units which are so often the recipient of both medical and social admissions are also a high demand unit here, however they have greater input over who they admit, exsisting in mainly a rehabilitation capaicty rather than as an overflow medical carpark, as such, they are free not to refuse patients who they feel would gain no functional benefit from admission under what is still a specialist team. Likewise the Emergency Department is a busy area of the hospital as would be expected. However, the case load I have experienced on orthopaedics has a greater bias towards acute admissions over elective knee and hip operations in the elderly than my experience in the UK. With the number of patients admitted after accidents being higher. I would imigine that this could be in part due to the fact that in East London, with the closure of the docks and reduction in manufacturing work based in the area, fewer people than in the past have manual jobs that include use of either industrial equipment or machinery for exmaple. Within the area served by Southland Hospital there are for example a number of farms and also areas of forest that require maintenance, just two occupations placing their workers at high risk of injury.

If you are unlucky enough to require emegency care for whatever reason, the cost of this will be covered by ACC or the Accident compensation coroporation, who will provide personal injury cover for New Zealand citizens or visitors. Other hospital care, for example elective operations or in/outpatient medical care at a public hospital is also publically funded for eligible parties, including NZ citizens, foreign nationals with work visas who's duration of residence is two years or more, citizens of countries with reciprocal health agreements such as the UK and Australia, some groups of students and refugees and people suspected of being the victims of people trafficing. People outside these groups for example diplomats or tourists from countries without reciprocal healthcare agreements are required to pay for care unless they have insurance. Public healthcare funding is sourced from general taxation, local government subsidy and private sources (e.g. insurance) and is distributed by district health boards, similar to the new CCGs in the UK with more decentralised funds.

At primary care level, there is something called a primary healthcare capitation, which is essentially a fee that you pay if you require a GP consultation. The cost of this is not fixed, instead being based on the enrolled population. For example working on the basis that the very old and very young, as well as women of child bearing age are likely to require more treatment. Subsidies are however availble to certain groups, for example people with two or more chronic health condition likely to need frequent and varied medical attention can be assessed for their suitability to receive care at a reduced price. There is also a 'very low cost access' scheme to financially support Primary Health Orgnaisations that serve high need populations and those in deprived areas that charge low fees. Primary care is organised by Primary Health Organisations to provide services either directly or through member service providers, including allied health services.

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Overall I feel that I made a wise choice in choosing to do my eletive in Orthopaedic surgery here in New Zealand. It has provided me with a valuable opportunity for furture career exploration and built on my existing knowledge of the specialty gained during my short placement in the UK. I also think that it has been a good experience to work within a slightly differently structured healthcare system from our own, not least of all to cherry pick some of the tips and tricks I have learnt from the doctors here. I initially chose the placement hoping to gain more experience in orthopaedic theatres as this was something I do not feel I had gained adequate exposure to so far in my training, enough to decide if it really was something I found exciting enough to pursue. I definitely got a lot out of my time in theatre, the team were all keen to involve me in a hands on capacity and I got a lot of one to one teaching that I would not have had the opportunity to get elsewhere. I also saw procedures I had never seen before and will likely not see again for the next few years. The unintended benefit of this placement was that I also have got some more insight into different junior doctor's ways to cope with the demands of the job, such as prioritising tasks and invesitgations when working with diverse and sometimes complex patients and spent more time than I thought I would on the ward trying to gain some more valuable experience there prior to starting my FY1 job in August. So all in all I feel that my time spent here has been both fun and beneficial on a number of levels.