

Workshop 1, SECURE Launch Event 2015; led by Professor Marian Scott

Environment, health and wellbeing

One common theme concerned the challenges that arise from the realisation that traditionally the linkage of health and environment is static, but in reality, this needs to be dynamic. As individuals we move through our environment, and are both actors and acted upon.

A second theme concerned the linkage of diverse data sources; these are often collected at very different temporal frequencies and with different spatial support - thinking about sampling and monitoring design would be useful. Ideally there needed to be timely information provided (so e.g. real time systems of alerts or warnings). Further, any statistics were often needed at a very local level.

With regard, e.g. to air quality as one instance, the focus was often on the average value, but this may not be the most relevant or useful statistic.

Citizen science could also be a useful tool here, especially as technology develops to allow small personal sensors - there are questions of interest concerning the balance and trade-off between accuracy, precision, and cost. There is considerable spatial and temporal variability, but technology is developing but perhaps not yet fully ready.

Further discussion concerned the role of the social sciences in this area, and how they needed to be involved.

Wellbeing might be something that is not well captured in clinical data sources, so there might be challenges in defining metrics of wellbeing.

Environment and health might also reflect not simply on human health but on ecosystem health. Further we might often be considering urban environments (not necessarily natural systems).