CONFERENCE ABSTRACT

Lumos: Connected data for a healthier NSW.

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Introduction: The NSW Ministry of Health has established Lumos; a pioneering initiative that links general practice data to a number of health system data collections, creating a unique data asset that spans health care services across NSW. Lumos sheds light on the patient journey through the NSW health system by "Linking Up and Mapping Of Systems", providing an essential platform for the design, delivery and evaluation of integrated value-based care pathways. Over the next three years Lumos will expand state-wide, linking data from up to 500 general practices across all 10 PHNs and 17 LHDs in NSW.

Policy context and objective: With the growth and ageing of Australia's population, and with the incidence of complex and chronic health conditions in the population, people's health needs are changing. To meet these changing needs, the challenge for the health system is to integrate care across the continuum of care settings and providers, delivering person-centred, seamless, efficient and effective care.

Lumos aims to provide this "whole of system" view of the patient journey. It delivers a trusted source of information that can be used to guide service design and integration, the commissioning of services, improved patient experience and outcomes, and the strategic directions of the NSW health system.

Targeted population: The Lumos cohort comprises anyone who attended participating general practices as a patient since 2010. It builds on the NSW GP Data Linkage Pilot Project which has successfully linked the GP data of approximately 400,000 patients from 40 general practices in NSW. The number of patients will increase as the Lumos Program progresses with repeated and expanding data collections and linkages.

Highlights (innovation, impact and outcomes): Lumos has provided participating GPs with a new picture of patients' healthcare journeys. For instance, 20% of their patients attended an emergency department (ED) in the past year, and many of these were for semi-urgent and potentially avoidable reasons. GPs can view how their patients' ED presentations relate to their characteristics and patterns of GP visits, and how this compares to other practices. This data is having a tangible impact on GPs, prompting one practice to extend its opening hours and another to follow up patients with chronic conditions to help reduce hospitalisations.

There are also new insights for acute care. People who smoke spend, on average, a full day longer in hospital than those who do not smoke. People with mental health diagnoses have higher use of all hospital services than people with other chronic conditions. Such statistics provide actionable insights into preventable hospital use.

Conclusions: Lumos has the potential to drive shared objectives across health services by providing an evidence-based platform to align strategy, policy and practice in patient care across NSW. The imperative to create the information needed to support health system redesign is now well established. Effort now concentrates on the processes needed to facilitate building secure, safe data assets that can deliver the much-needed insights for health care system reform and improved patient outcomes.