
eConsultant implementation and evaluation

Initiative Type

Model of Care

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Summary

The Mater Hospital's eConsultant model is an asynchronous GP-to-General Physician communication over secure messaging. eConsultant provides a formalised, efficient and documented method for GPs to access specialist support for patients and reduces patient wait times for specialist input and requirement for face-to-face hospital visits. The request for advice (RFA) service supports

GPs wanting access to specialist endocrinology, cardiology, dermatology, respiratory and sleep, neurology, renal and obstetric medicine. The GP receives feedback from the Mater eConsultant within three business days.

Key dates

Apr 2018

Dec 2022

Implementation sites

General practices, ATSI, RFDS & hospital and health service practices in Western Queensland and Brisbane South.

Partnerships

Mater Hospital South Brisbane; WQPHN; BSPHN; Queensland Health (Office of the Deputy Director-General, Healthcare Purchasing & System Performance Division & Office of Chief Clinical Information Officer, Clinical Excellence Division); South West Hospital

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Aim

This research program aims to evaluate the implementation of an electronic consultant model in the Australian setting.

Benefits

The mean turnaround time for patients to discuss the eConsultant specialist advice with their (General Practitioner) GP of 12 days was 18 days less than Category 1, 78 days less than Category 2, and 353 days less than Category 3 recommended waiting list timeframes. The eConsultant mean time to assess the request for advice (RFA) and respond via secure messaging was 27 minutes, well below the 45-60 minute Outpatient Department (OPD) appointment booking usually allocated for new patient assessments. All RFA received an answer from the eConsultant, and in 86% of cases, patients avoided a face-to-face specialist visit, with the associated savings in cost and time for travel particularly noted by rural and remote patients and providers. GPs and patients valued the timely and effective specialist input.

Background

Demand for specialist services is increasing with trends to longer life and increased prevalence of complex and chronic disease. This increase in demand and concomitant delays in obtaining specialist input, can lead to a deterioration in health, increasing the likelihood of avoidable hospital attendance. Delayed access is most pronounced in rural and remote Australia given the largely metropolitan distribution of specialist services. Apart from patient referrals to in-person specialist care there are currently limited systems in place for GPs to access specialist support and informal methods are commonly used by GPs, such as telephoning personal specialist contacts for advice. International evidence from the Mayo Clinic and the University of California San Francisco (UCSF) suggests increased efficiency, quality and satisfaction with care, by allowing GPs secure electronic access to specialist input, and avoiding unnecessary OPD attendance.

Solutions Implemented

The University of Queensland-Mater Research Institute (UQ-MRI) and the Mater Adults Hospital Brisbane have created an asynchronous secure electronic request for advice system, which links GPs with a general physician at the Mater Adult Hospital Brisbane. eConsultant is an asynchronous

General Practitioner (GP)-to-General Physician communication over secure messaging which provides a formalised, efficient and documented method for GPs to access specialist support for patients and reduces patient wait times for specialist input and the requirement for face-to-face hospital visits.

Evaluation and Results

GPs send a Request for Advice (RFA) to the general physician (eConsultant) and advise patients to schedule a timely follow-up appointment to discuss the eConsultant advice. A retrospective review of RFA data was performed, qualitative interviews were conducted with GPs and nine key informants (providers/ patients) completed a brief e-questionnaire assessing implementation. This study is underway in 10 rural/remote and nine urban Queensland general practices. To date, RFAs have been generated for 119 patients, with a mean age of 60 years and an average of 1.5 comorbidities. The GPs mean time to response from the eConsultant was 1.5 (SD 1.1) days and patients mean time to specialist input (initial GP to GP follow-up appointment) was 12.3 (SD 14.6) days. RFA's predominately related to diagnosis, disease management and monitoring of general medicine and musculoskeletal conditions. All RFA were independently judged by a general physician to meet Category 1-3 OPD criteria, with the majority classified as Category 2 or 3. In all cases, RFAs were accompanied by an auditable record, of the interaction between the GP and specialist in both practice and hospital settings, avoiding the risks of the unrecorded phone conversations often used by GPs for specialist advice. Neither the GP nor eConsultant noted any quality or safety concerns.

Lessons Learnt

Implementation of eConsultant demonstrates the potential of an internationally validated model of care, with benefits to Queensland patients, practices, and the health system. The majority of patients had two or more comorbidities, with RFA focused on diagnosis, disease management and monitoring. This reflects the increasing number of patients attending general practice with complex comorbidity, and the challenges facing GPs in adjusting medication and fine-tuning management. Our study highlighted workforce benefits for physicians, including the potential for increased workplace flexibility and variety. The qualitative interviews with GPs and the eQuestionnaire of key stakeholders highlighted contextual factors that have influenced the delivery of eConsultant across the urban and rural and remote settings, including practice leadership and staffing, support for digital technology, workflow integration, and recent external events such as COVID19. QH practice engagement has been hindered by organisational IT issues.

References

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Gupte G, Seraj SM, Orlander J, Berlowitz D, Fincke BG, Simon SR. Electronic consultations (e-consults) to improve access to specialty care: a systematic review and narrative synthesis. *J Telemed Telecare*. 2015 Sep;21(6):323-30 Wrenn K, Catschegn S, Cruz M, et al. Analysis of an electronic consultation program at an academic medical centre: Primary care provider questions, specialist responses, and primary care provider actions. *Journal of Telemedicine and Telecare* 2017;23(2):217-24 <https://www.champlainbaseeconsult.com/>
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Further Reading

Job, J.R., Donald, M., Borg, S.J., Nicholson, C., Chaffey, J., O'Hara, K., Fagermo, N., Jackson, C.L. (In Press) Feasibility of an asynchronous GP to General Physician eConsultant outpatient substitution program: a Queensland pilot study. **Australian Journal of General Practice** 2021 Nov;50(11):857-862 [Mater eConsultant](#)

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