Developing a novel paperless E-pathway for Infection consultations clinic for a large teaching hospital and primary care in northwest England: A strategy to reduce morbidity and mortality from sepsis and comply with Royal College of Pathologist standards

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Background:

Sepsis kills almost 44,000 patients in UK per year. Antimicrobial resistance (AMR) review UK, projected 1 death (globally) every 3 seconds by 2050 due to continued rising trend of resistant infections. Correct diagnosis and prompt administration of optimal antibiotic/s are corner stones of any antimicrobial stewardship and reducing mortality from sepsis strategy. Royal College of Pathologists, UK key performance indicators for consultant Microbiologist include response to consultations within the hour. Regional audit indicated poor compliance to this standard across multiple sites. We present the experience with a novel paperless E-pathway for infection consultations clinic for a teaching hospital and community/primary care in northwest England.

Material/Methods:

Hospital web designer team helped to customize a software application (http://nervecentresoftware.com/), already in use within the hospital for a non-clinical service, for the purpose of submitting E-referrals for Infection Consultations (including minimal clinical data, priority and grade). This is linked to the patient information system and self populates patient demographics and location. Back office generates regular customised reports including parameters requested (KPI). E-referrals can be accessed/closed by consultants on dedicated hospital computer or hospital iPhone/iPAD.

Results:

Data Jan 2016 – July 2017, indicates improvement in consultation response to E-referral from 63% to 93% with 1h. Total number of E-referrals varied from 22 to 60 per day; peaks of referrals around 3pm and 11am; Data reflects variety of parameters such as number of referrals closed by each consultant in the department, responded to within the hour by each consultant, E-referrals from primary care vs acute site; grades of person submitting referral, by division (Medical, surgical, specialist tertiary units) and specialty. Details & graphs to be presented. This has significantly reduced the number of calls to hospital switchboard and medical secretaries.

Conclusions:

The results indicate significant improvement in responding to consultations within the hour, significant reduction in number of calls to hospital switchboard and secretaries; The data is fully auditable, quantitates workload figures, KPI and reports and robust evidence for new consultant business case and UKAS inspection.