

For consideration for the
RCGP Innovation Award 2014:

***The Denburn Urban
Access Project***

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The Denburn Urban Access Project

Summary of the areas of innovation to be considered:

- The use of telemedicine in the urban setting to bridge the urban access divide;
- Increased productivity: clinical contacts for each GP increased from 110 per week → 220 per week;
- Clinical workload forecasting and scheduling through patient demand and access matching;
- Elimination of appointment backlog;
- Elimination of patient non-attendances: cost saving of saving of 20,000 pounds annually, which equates to 2.5 GP sessions (salaried) a week;
- Reduction in out-of-hours (OOH) attendance and emergency admissions: resultant reduction of 20% OOH contacts;
- Clinical Decision support: establishing GPs as Consultants and decision makers. Creating a centralized resource of GPs accessible at anytime;
- Space efficient working (Hub-Based-Working). We have increased clinical staff levels by over 30% of maximum room capacity yet accommodated them in a traditional Practice footprint;
- Remote working from home to allow greater staff availability and flexibility;
- Solidification of the GP supported Advanced Nurse Practitioner role within daytime General Practice.

The Denburn Urban Access Project: Background

The Denburn Medical Practice was formed approximately 3 years ago from the merger of two smaller practices: the Northburn and the Viaduct. We are an inner city practice with a list size of approximately 10,400 patients with significant deprivation and a large transient and student population. The merger was seen as means of creating a robust business model that would improve patient care.

The impetus for us to look at a different way of working included:

- ***Debt accrual:*** the practice through covering long-term sickness had accrued significant amount of debt;
- ***Unhappy staff and problems with retention/recruitment:*** the lack of continuity of service had a knock on effect on staff morale and, in turn, attracting new doctors to the practice;
- ***Loss of institutional and organisational memory:*** long term absence of several GPs lead to a loss of leadership and practice direction. This was further exacerbated by loss of long-term administration staff, which led to degradation of established systems of working;
- ***Low prevalence and low earning practice/ Small and vulnerable practice:*** Coupled with the debt accrual the practice had limited financial and staffing resources. The merger benefited us through *economies of scale*;
- ***Wide catchment; 'Dee to the Don':*** Travel time for house visits impacted on resource utilisation and threatened the peripatetic care model;
- ***Difficulty meeting our appointment demand:*** The net effect of our challenges was the negative impact on staff morale and patient

satisfaction. Patients could wait for up to 2 weeks for a routine appointment.

Opportunities and meeting our challenges

The creation of the new practice, although a difficult process, allowed the reimagining of service provision, management/clinical systems and the creation of a new organizational structure. We looked to exploit our strengths as a team and address each of the challenges in turn:

- ***Small Vulnerable Practice →GMS practice merger:*** Merging with another practice allowed pooling of the clinical staff and financial resources. This created a viable business model, allowed the debt accrual to be addressed and, in turn, stabilised the practice.
- ***Loss of organisational memory:*** Allowed system and care delivery redesign without being held back by the burden of tradition and archaic ways of working.
- ***Blue Sky thinking:*** A relatively young team happy to think conceptually and 'out the box'.
- ***Few Partners:*** This allowed quick decision making with little procrastination. The partners had expertise in telemedicine and unscheduled care, both of which were exploited.

Trial and Error

Various systems were trialed with a pragmatic ethos: 'If it works then keep it':

- *Variations of duty doctor systems*
- *Increasing access: Walk in clinics; increase in same day appointments; extended hours*

- *Nurse-led triage*
- *GP led triage: reactive versus proactive models*
- *Increasing sessional commitments*
- *GP supported nurse practitioner visiting*
- *Covering sessions with locums/career starts/retainers etc.*

Realised Outcomes and the Final System

Urban Telemedicine

Telemedicine is defined as the remote diagnosis and treatment of patients by means of telecommunications technology. Traditionally, telemedicine has been used in a rural setting to bridge the geographical access divide. Our idea was to use telemedicine in an *urban* setting, to increase patient access to clinicians. The access issues, although not geographical, related to poor access to clinicians who were 'bogged down' by trying to meet undifferentiated patient demand.

We used a combination of tele-triage and telemedicine (telephone-based consulting) to speak to every patient who wanted to see us. This ultimately provided better access to care and allowed prioritisation of clinical workload. We found that many follow up appointments could be conducted over the telephone, which allowed major timesaving for the clinical staff. We also found that proactive versus reactive triage was a far more efficient way to manage patient demand. The traditional reactive model involved triage as a fire-fighting measure, after appointments had been mainly used. This led to the clinician having little resource to work with.

We addressed problems as we encountered them. This included:

- Doubling the number of incoming telephone lines to eliminate access bottlenecks;

- Staff training and change of reception culture away from deflecting work to facilitating access;
- Understanding our patient demand and required staff levels to meet this;
- A proactive triage model where GPs, not receptionists, controlled the appointments: the practice's main resource. To facilitate this, GPs were able to book into an identifiable appointment resource, advanced nurse practitioners, FY2s as well as having complete control over their own appointment list.

Matching Capacity to Demand

The practice explored various enhanced access systems and incorporated the concept of dynamic working that matched real time capacity to demand.

- ***Cataloguing and recording of patient demand:*** Upon removing patient contact barriers, we were able to see our real time patient demand and put measures in place to appropriately and safely deal with this.
- ***Clinical demand forecasting:*** Analysing the activity data allowed prospective planning for seasonal variations of patient demand. This allowed elimination of our appointment backlog as resources were utilised to maximum efficiency. It also allowed effective annual leave planning.

Solidification of the Advanced Nurse Practitioner (NP) and FY2 role

In triaging all patient appointment requests, the GPs were able to maximize the efficiency of the nurse practitioner and FY2 role in the practice. Patients could be appropriately booked at the skill level of the relevant practitioner. The GP would

retain an overview of patient care at all times and be accessible for contemporaneous decision support. This allowed the NPs to see patients in 10-minute appointments for most conditions.

A further benefit was the training aspect for both the NPs and FY2s. The clinical supervisors now had the ability to tailor the mix and complexity of cases to challenge the clinicians at their appropriate level.

GPs in a consultant role

GPs' strengths lie in their pragmatic decision making and dealing with uncertainty while balancing risk. This was maximized by GPs streaming all the work to the appropriate clinician and resource while maintaining overall responsibility for patient care. We thus created a hierarchical structure similar to consultants in secondary care. Patient contacts doubled for each GP and patients were directed to the correct clinician at the correct time.

Space efficient working (Hub Based Working)

We have increased clinical staff levels by over 30% of maximum room/premises capacity yet accommodated them in a traditional practice footprint. This has been achieved by having a centralized communal area, 'The Hub', where all GPs telephone consult from.

We found that each GP could talk to 50 patients on a given day; of these patients approximately 15 would convert to a face-to-face consultation. From these 15 face-to-face contacts, on average only 5-6 patients needed to be seen by the triaging GP. The remaining 10 patients could safely be managed by FY2s or NPs. Consulting space for an individual GP was needed for seeing approximately 6 patients daily; translating to only 1 hour a day (6 patients x 10minutes=1hour). It became easy for multiple GPs to book patients into shared consulting rooms, thus resulting in an innovative and modern take on the hot-desking concept.

Further benefits of centralised hub working were the increased availability and accessibility of GPs to the wider team. This allowed receptionists, the administrative team, FY2s, ANPS and the practice nurse to locate a GP for support or advice without any issue. New clinical staff induction was also accelerated, as new doctors were able to ask questions and shadow easily.

Remote working

One of the desires of the system was to have a scalable workforce to match the dynamic nature of the clinical workload. This was achieved by using a remote access solution. GPs who were not geographically located in the building performed Tele-triage and Telephone Consulting at remote sites (home based). This innovation allowed non-Practice based GPs to book patients into a central Practice resource consisting of Nurse Practitioners and FY2 Doctors. The flexibility and scalability of this set up allowed the Practice to meet any Clinical capacity shortfalls resulting from unforeseen circumstances, such as sickness and unexpected absence.

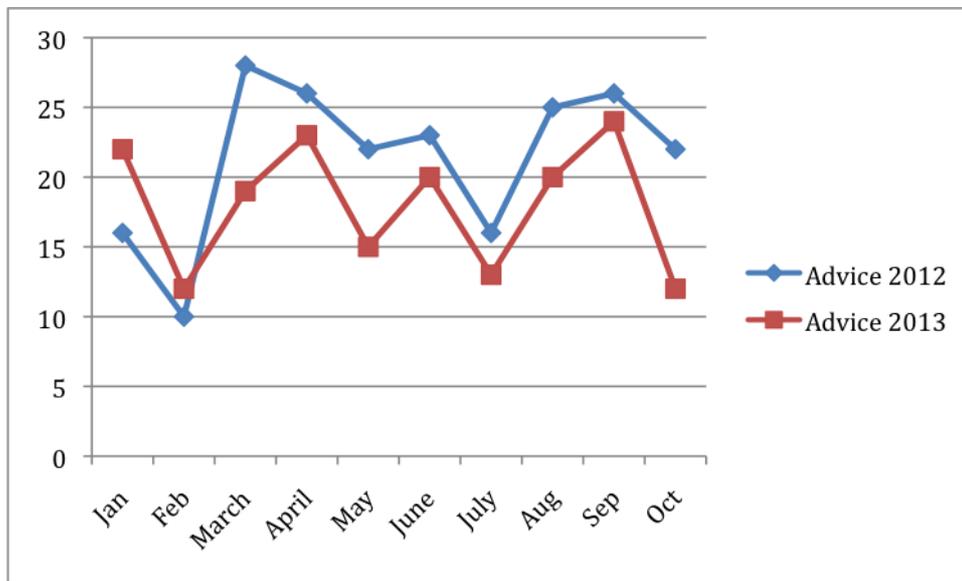
Key Points: Summary of the Benefits of the Denburn Urban Access Project

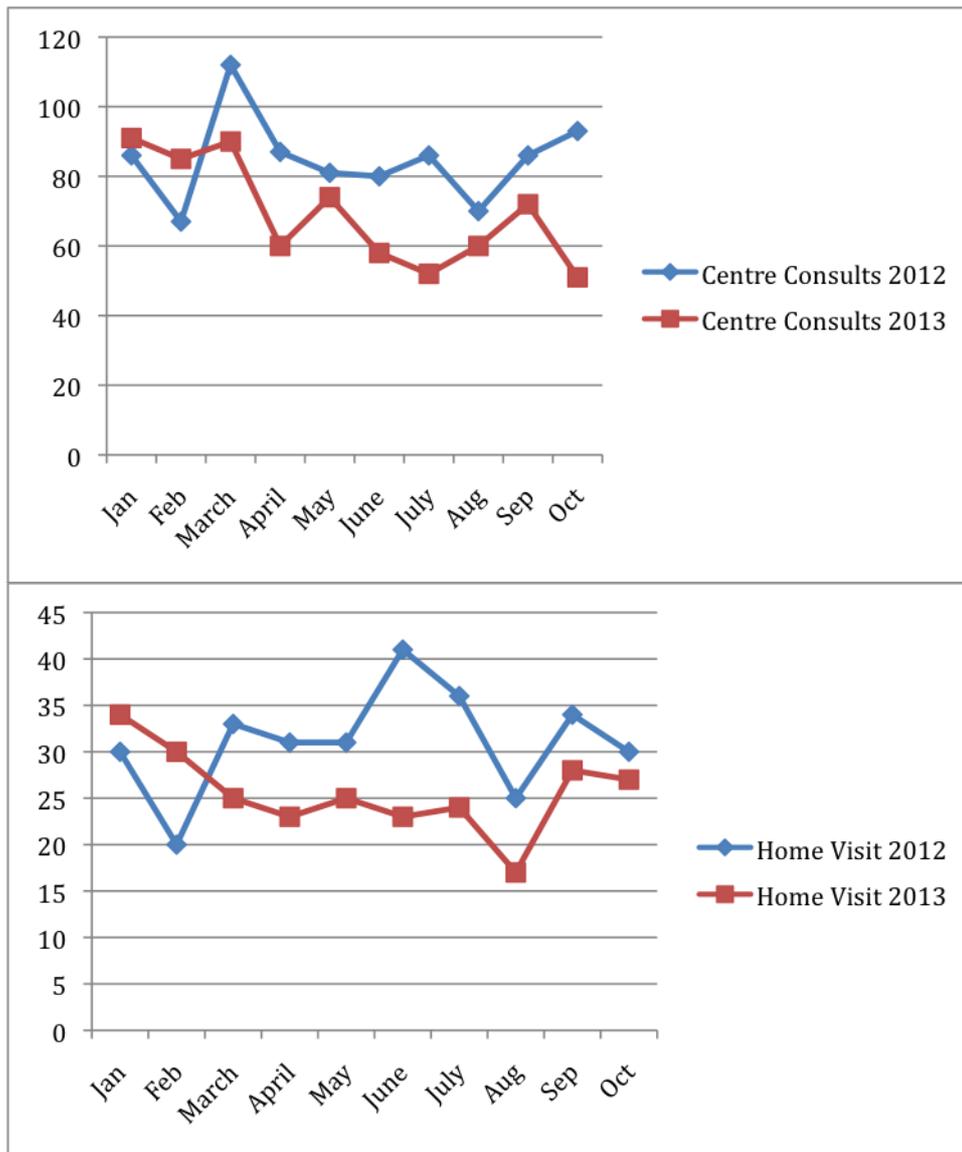
- *Clinical contacts for each GP increased from 110 per week → 220 per week*
- *DNA rate practically eliminated resulting in saving of £20,00 per year*
- *Reduced OOH contacts by approximately 20%*
- *Eliminated appointment backlog no waiting for appointments*
- *Increased access of GPs to all team members leading to real time decision support*
- *Increased clinical staff number without increasing utilised clinical space*
- *Increased patient satisfaction*
- *Increased receptionist satisfaction*
- *Improved clinical staff recruitment*
- *Partners feel we have increased job satisfaction*
- *Better continuity of care*

Supporting Data

Reduction in out of hours contacts

Below are the out of hours contacts for the Denburn Medical Practice Population prior to introduction of our project and post. (Denburn Urban Access Project Introduced in February 2013)





Patient satisfaction data

A patient satisfaction survey was conducted this year involving. Over 200 patients were involved. The full paper is available at:

<http://www.denburnmedicalpractice.co.uk>

A summary of the salient points are illustrated below:

- *89% of patients were satisfied with the outcome of their telephone consultation*

- *85% of patients felt there was enough time on the phone to discuss everything they needed to with the doctor*
- *80% of patients were reassured by having earlier contact with their GP*
- *94% of all patients who received a face to face appointment were given one either the same day or on an alternative suitable day of their choice*
- *87% of patients were satisfied with the length of time it took for the practice to return their call*
- *84% of patients said they were able to receive a call during surgery hours and that it was convenient for them to receive that call*
- *90% of patients stated the doctor understood what they were saying on the phone*
- *70% of patients were either satisfied or very satisfied*
- *Only 45% of patients could say the same about the previous system*