Type 2 Diabetes Primary Care Management Quality Improvement Project: *moving from a medicalised model to a community based multi-disciplinary approach*

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Overview

- Why QI?
- Why now?
- Quality Improvement
  - Culture and Context
  - Diagnosis
  - Plan and Test
  - Implement and Embed
  - Sustain and spread

Culture and Context

- Previous system was traditional model of patient seeing the nurse followed by the Doctor
- Changes in diabetes prevalence, management and GP staffing structures
- Evaluating the culture and context prior to commencement; *is the soil fertile enough to allow the seeds of QI to flourish?*



Diagnosis

- Current system did not allow for all diabetic patients to receive an annual review
- Developed a wider practice diabetic team
- Together developed a process map



Plan and test

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?

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  Improve Primary Care Prevention & Management of T2DM

  1. Improving access to primary care diabetic services
  2. Improving patient self-management of diabetes
  3. Target patients with pre-diabetes to prevent/delay onset to T2DM

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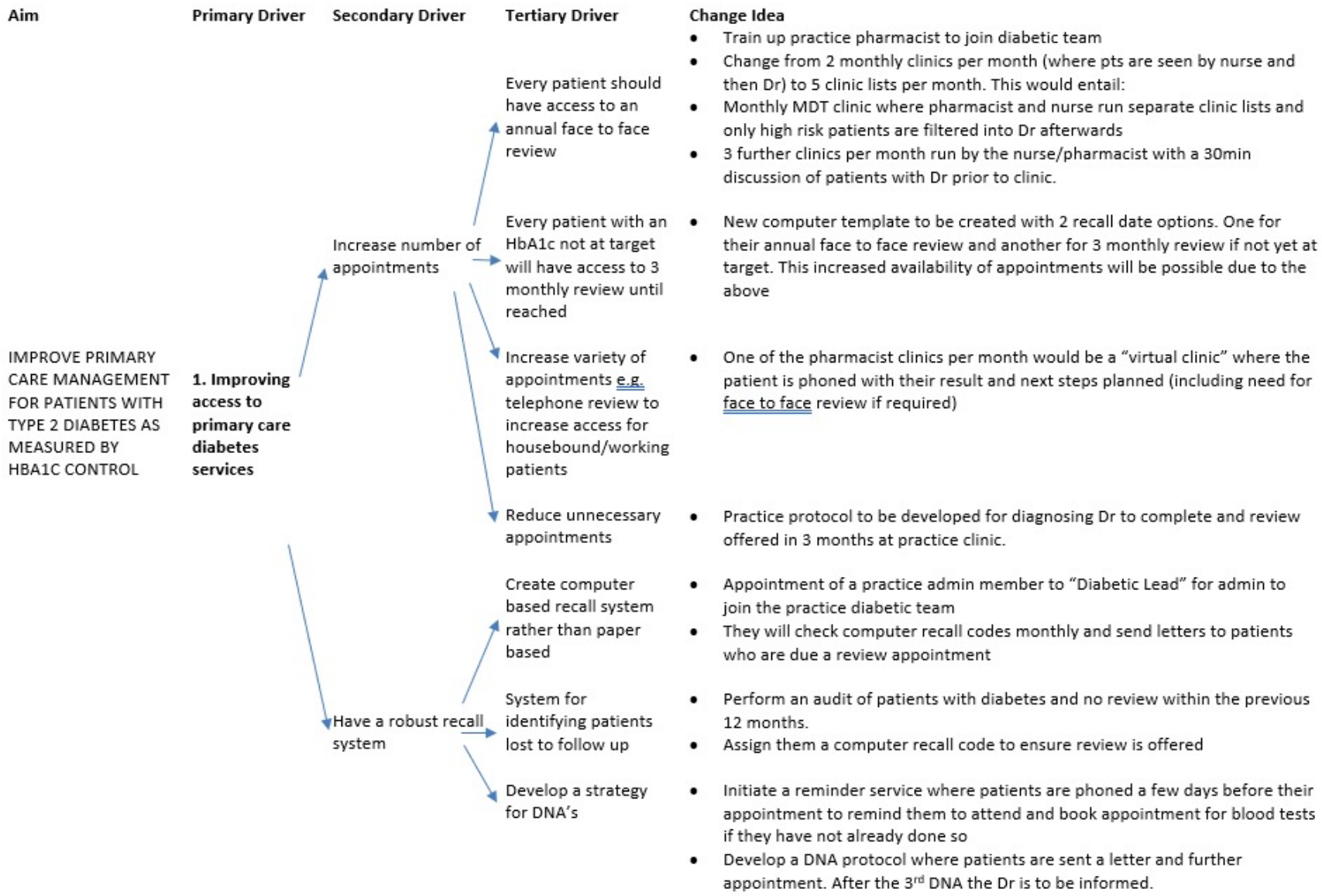
  Outcome measure: HbA1c values

  Process measures

  1. No. of monthly diabetic appointments/month
  2. DNA rate
  3. No. of patients issued with educational resources
  4. Pre-diabetics receiving annual review
  5. Patient questionnaire
  6. Staff evaluation and feedback re workloads

- What changes can we make that will result in improvement?

Driver Diagram



Primary Driver 1: Improve access to primary care diabetic services

Increase Number of Appointments

Having a robust recall system

Primary Driver 1: Improve access to primary care diabetic services

Increase Number of Appointments

- Every patient should have access to an annual face to face review
- Every patient with an HbA1c not at target will have access to a 3 monthly review until reached
- Increase variety of appointments e.g. telephone access for housebound/working pts
- Reduce unnecessary appointments

Having a robust recall system

- Train practice pharmacist to join diabetic team
- Change from 2 monthly clinics to 5 clinics on a 3 tiered system:
  - 1x Monthly MDT clinic for high risk patients (Hba1c >75) with Dr, nurse and pharmacist
  - 3 x Nurse/Pharmacist led clinics with 30min discussion at beginning with Dr
  - 1 x telephone virtual clinic for reviews with pharmacist

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- Created computer template with 3 recall options; one for their annual review either MDT or normal clinic in 12 months and addition of 3 month review at virtual clinic if required

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- Reduce unnecessary appointments
  - One clinic per month would be a ‘virtual’ telephone clinic

Having a robust recall system

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Having a robust recall system

- Reduce unnecessary appointments

- Developed a practice protocol for diagnosis of diabetes for diagnosing Dr to complete and review offered at practice clinic in 3 months

Primary Driver 1: Improve access to primary care diabetic services

Increase Number of Appointments

Having a robust recall system

- Create computer based recall system rather than paper based
- System for identifying patients lost to follow up
- Develop a strategy for DNA's

- Appointment of a practice admin member as 'Diabetic Admin Lead' to join the practice diabetic team
- They will check computer recall codes monthly and contact patients due for review

Primary Driver 1: Improve access to primary care diabetic services

Increase Number of Appointments

Having a robust recall system

- Create computer based recall system rather than paper based
- System for identifying patients lost to follow up
- Develop a strategy for DNA's
- Perform quarterly audit of patients with diabetes and no review in the last 12 months
- Assign a computer recall code to ensure review is offered

Primary Driver 1: Improve access to primary care diabetic services

Increase Number of Appointments

Having a robust recall system

- Create computer based recall system rather than paper based
- System for identifying patients lost to follow up
- Develop a strategy for DNA's
- Text reminder service prior to appointment and check if attended for bloods, phone if not
- Develop a DNA protocol for non-attendance

Primary Driver 2: Improving patient self-management of diabetes

Addressing barriers to making positive changes

Increasing patient education

Supporting patients to improve their lifestyle control of diabetes

- Routinely explored potential barriers to change during appointments
- Increased staff education around behavioural change by attending training session from a psychologist through the ECHO Programme.
- Referring to the practice mental health practitioner where mental health difficulties were identified as a barrier to change

Primary Driver 2: Improving patient self-management of diabetes

Addressing barriers to making positive changes

Increasing patient education

Supporting patients to improve their lifestyle control of diabetes

As well as encouraging referral to Desmond at diagnosis we:

- Sourced and stocked education booklets from Diabetes UK to give at point of diagnosis
- Sourced and stocked diabetic diet education booklets
- Add link to practice diabetic template for DVLA driving rules to allow this to be issued and recorded when commencing SU
- Developed a sick day rule document linked to template which can be issued at review
- Develop text links which could be sent via accurx.

Primary Driver 2: Improving patient self-management of diabetes

Addressing barriers to making positive changes

Increasing patient education

Supporting patients to improve their lifestyle control of diabetes

Involved the use of the practice social worker to help identify up to date community based options for patients tailored to their needs which included:

- Local exercise referral schemes
- Referral to healthy food and cooking classes
- Social prescribing
- Diabetic support groups
- In practice run ‘steps to change’ course

Primary Driver 3: Targeting patients with pre-diabetes to help prevent/delay onset of T2DM

Identify patients with pre-diabetes in the practice

- Audit to identify patients with undiagnosed pre-diabetes. When identified, contact patient for appointment with pharmacist
- Audit of patients with existing diagnosis of pre-diabetes with no annual Hba1c check and invite them to attend
- Develop practice register of pre-diabetic patients with a quarterly audit of patients overdue their HbA1c check

Provide education and improve self-management at this early stage

Primary Driver 3: Targeting patients with pre-diabetes to help prevent/delay onset of T2DM

Identify patients with pre-diabetes in the practice

Provide education and improve self-management at this early stage

- All new and existing diagnosis of pre-diabetes to be offered appointment with diabetic pharmacist
- Patient education leaflets to be sourced and issued
- Patients to be advised of local diabetic service educational programmes and offered referral
- Patients to be offered referral to local exercise programmes/healthy eating classes/steps to change

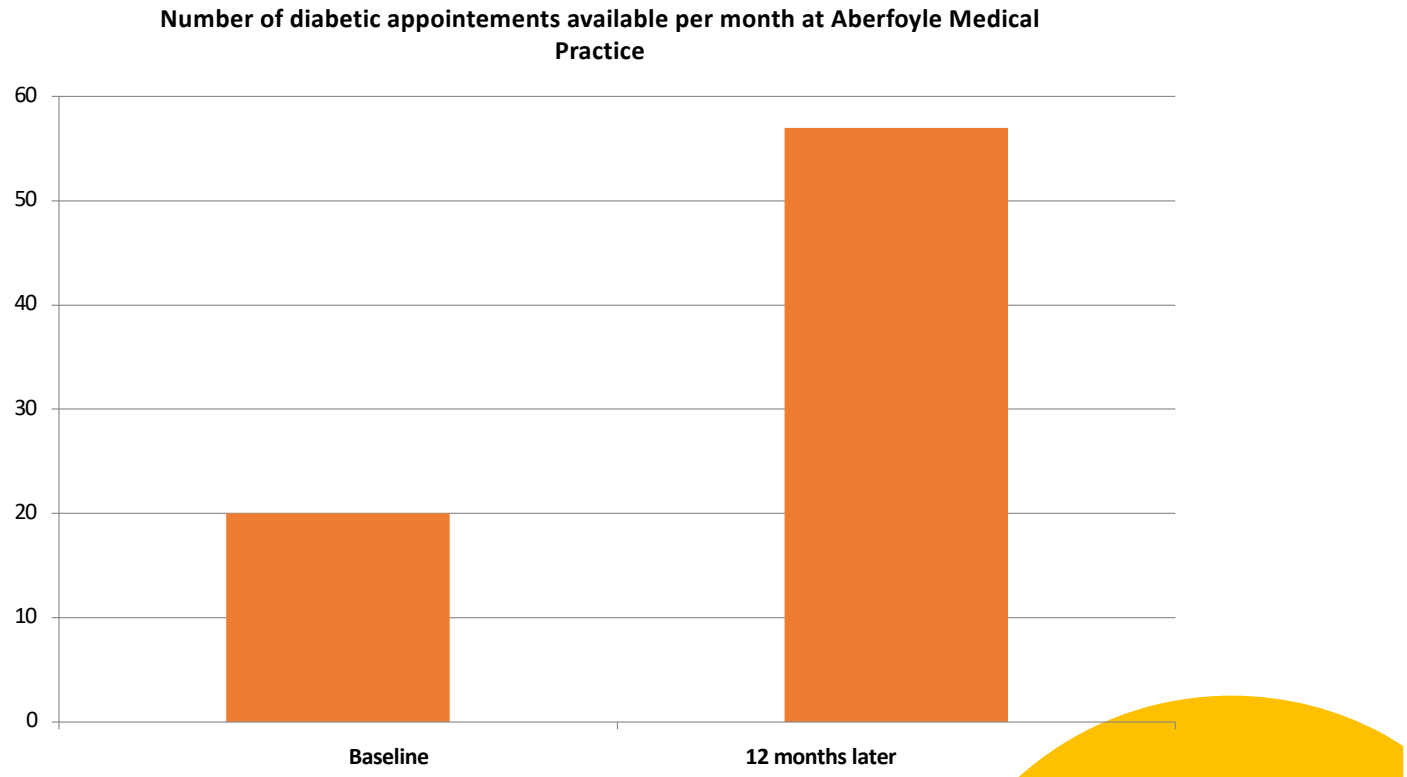
Implement and Embed

- Interventions were sequentially introduced over a 12 month period with regular review as a team and looking at data (run charts) to assess impact of change.

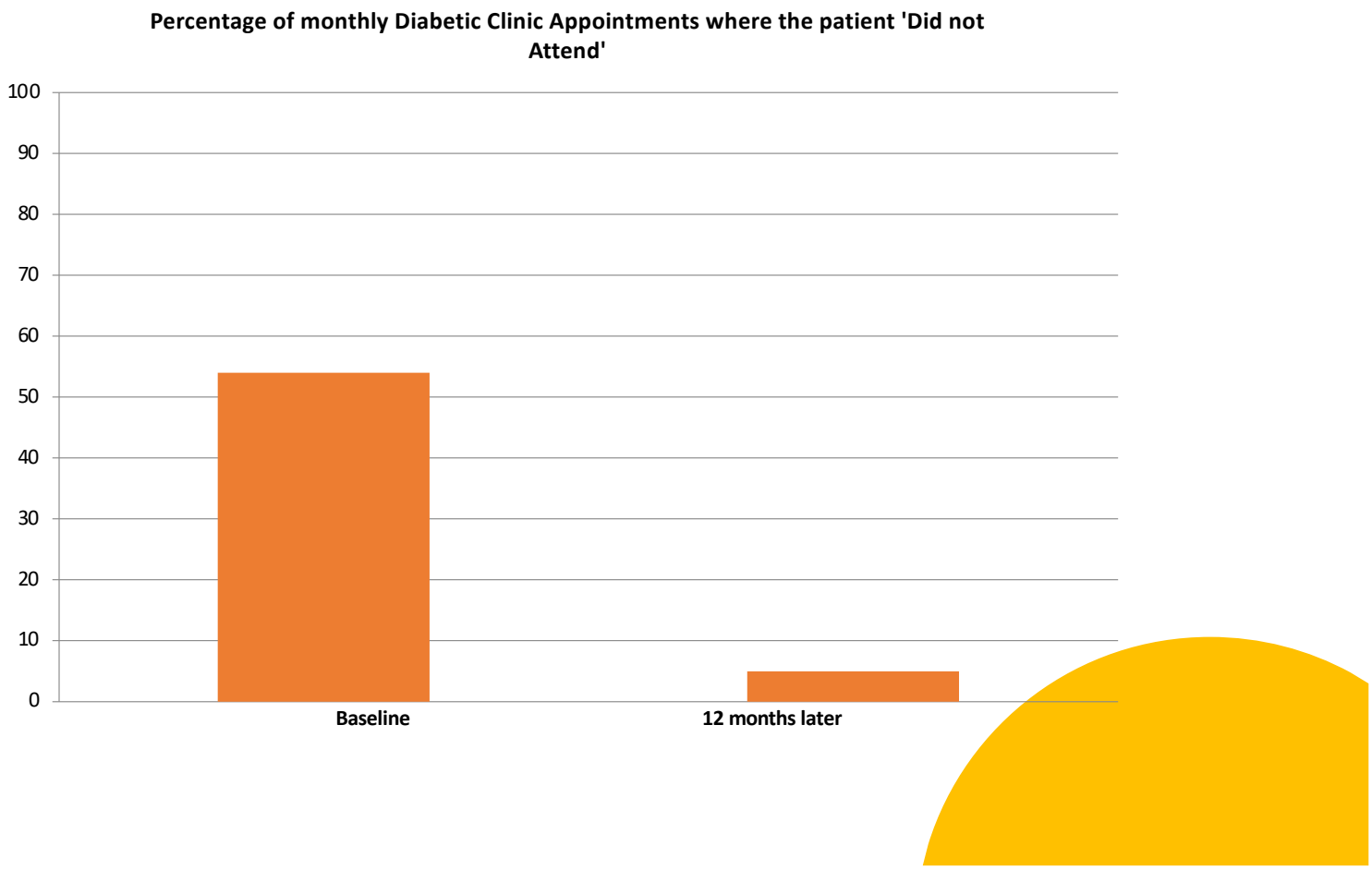
Improvement in HbA1c

Patients with Diabetes where…		Baseline		12 months later		Today
		No. of patients	% of patients	No. of patients	% of patients	
the last IFCC-HbA1c in the preceding 15 months is	59mmol/mol or less	269	**59%**	295	**65%**	**68%**
	64mmol/mol or less	319	**69%**	340	**74%**	**75%**
	75mmol/mol or less	371	**80%**	393	**85%**	**82%**
the last BP reading in the preceding 15 months is	<140/80	302	**65%**	339	**73%**	**70%**
	<150/90	386	**81%**	417	**88%**	**82%**
the last cholesterol reading in the preceding 15 months is	<5	338	**74%**	374	**82%**	**81%**

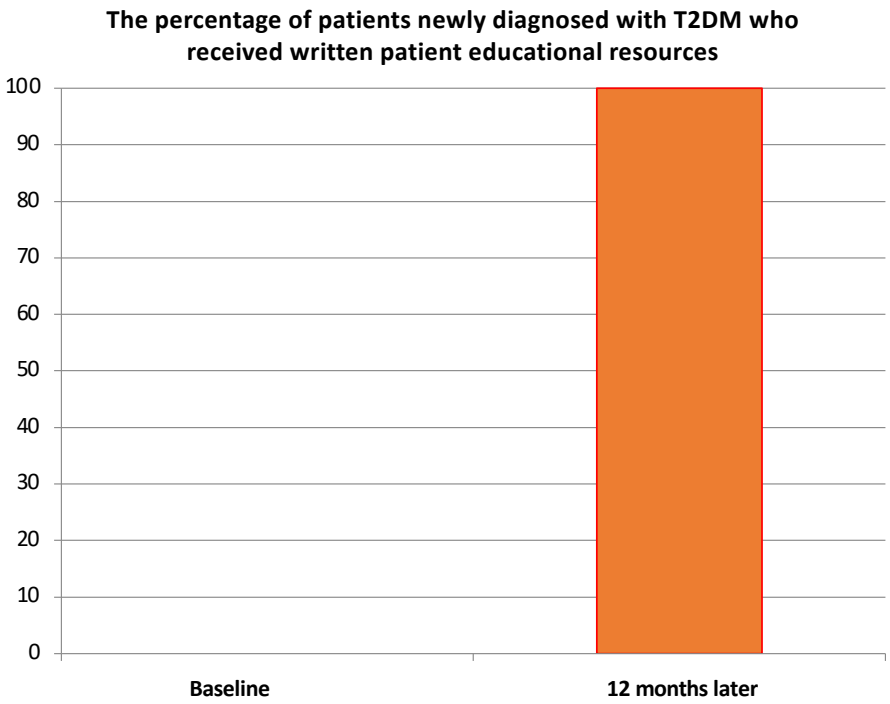
Capacity for appointments

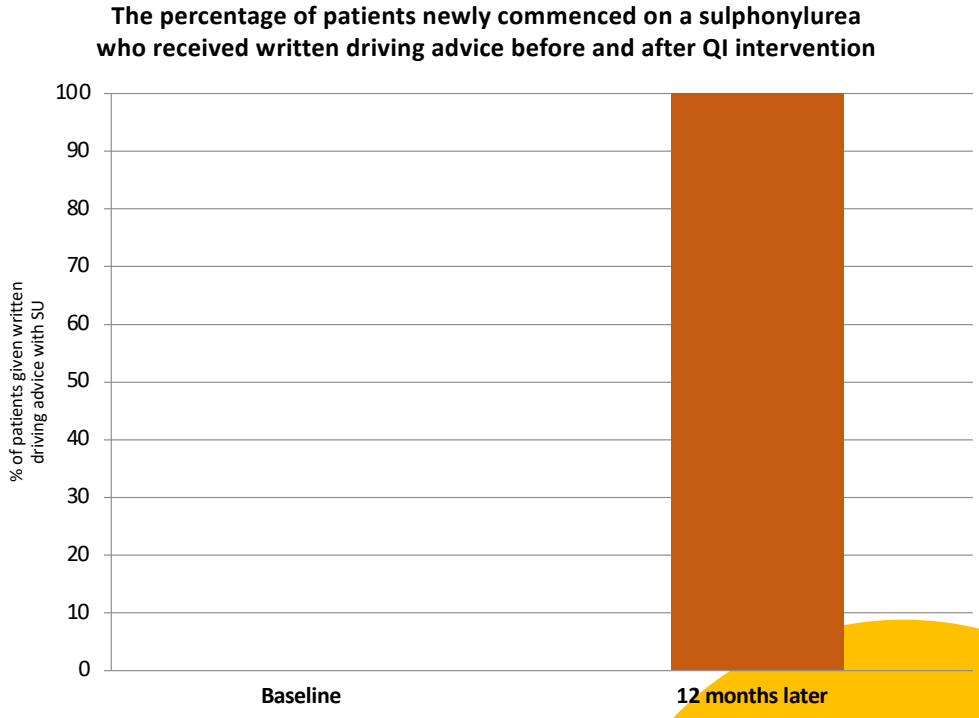


Reduction in DNA Rate

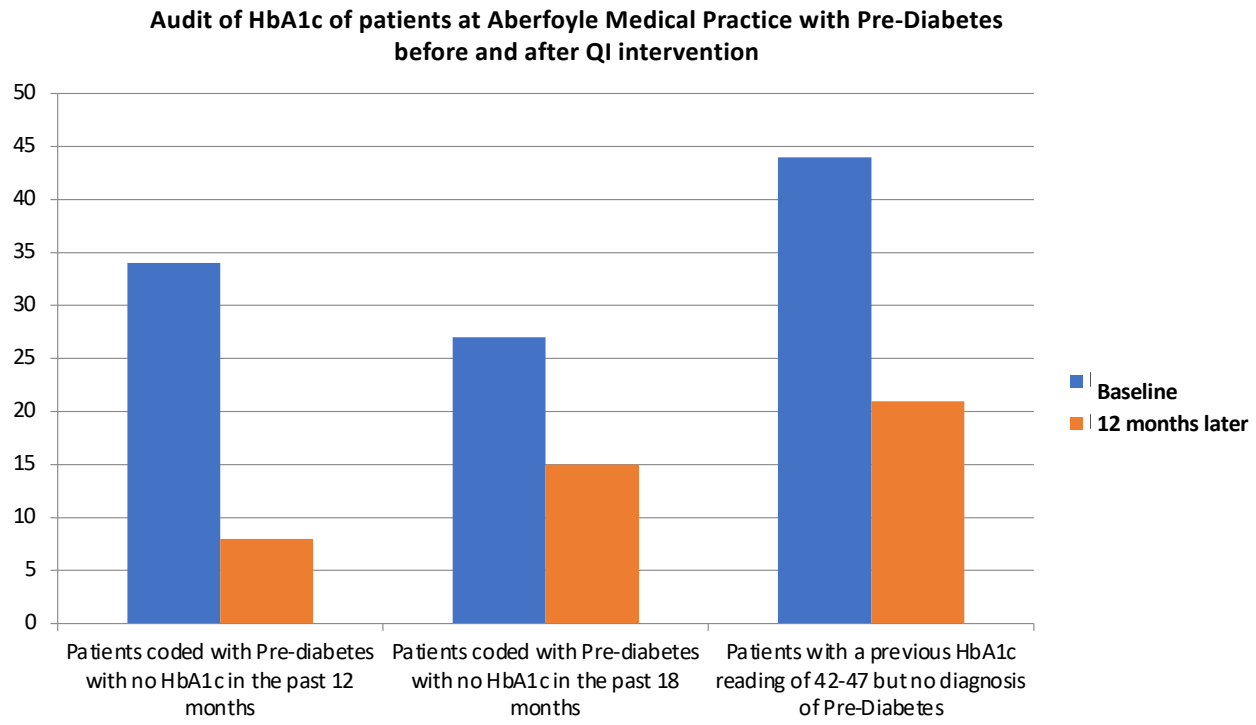


Increase in provision of educational resources

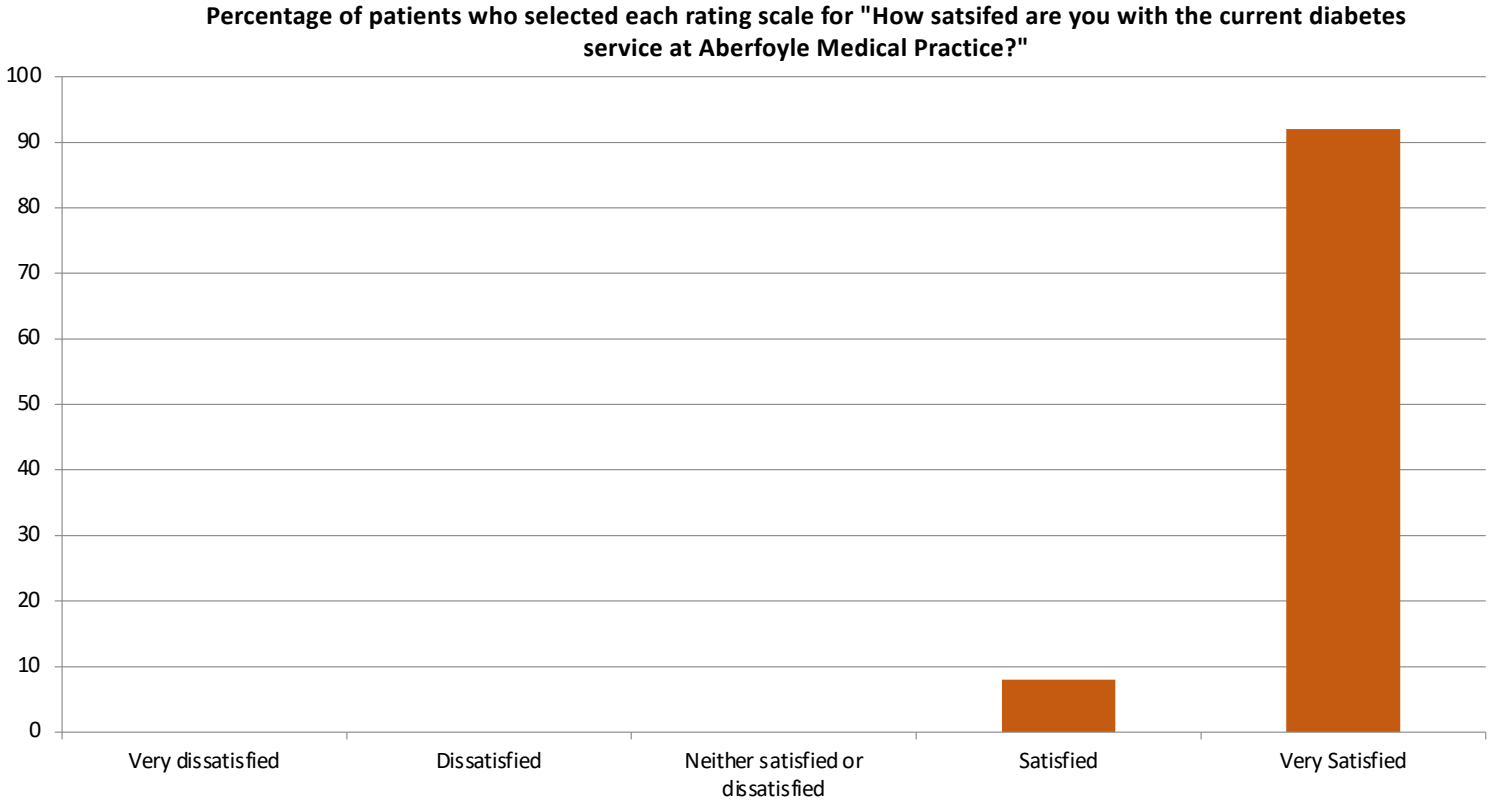




Increase in coding and monitoring of pre-diabetics



Patient Satisfaction



Sustain and Spread

How do we sustain change?

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- Develop systems with built in reviews rather than one off points

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How do we sustain change?

- Develop systems with built in reviews rather than one off points

- Continue to prioritise evaluation exercises to react to change

Summary of our learning points

- Clinician expertise/knowledge is often not the limiting factor to improvement in patient management
- Take it slow, work on the culture and readiness to change first.
- Recognise and work within your limiting factors.
- Start with a ‘quick win’ to build confidence in your wider practice team
- Importance of developing a wide team in primary care across all disciplines, with the added benefit of improving staff morale
- Need to build in systems which can sustain the changes made
- Ongoing process, requires regular review to allow adaptation to current needs/change in circumstances

Thank you