Virtual Ward Round – Improving Diabetes Care

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• Background
• What is known
• The virtual ward round in Ealing
• Care in action case examples
• Outcomes
Diabetes and severe mental illness

• Diabetes and diabetes related death more common in the with severe mental health disorder
• Co-morbidity worsens the prognosis of both disorders
• Mental health teams are fearful of the management of diabetes
• Physical health teams can feel unsupported in engaging with people with diabetes in the context of severe mental health disorder.
Lifestyle

Health beliefs

Experience of health care

Self care

therapy

Respect our patients and colleagues | Encourage innovation in all that we do | Provide the highest quality care | Work together for the achievement of outstanding results | Take pride in our success
What is known

• Very Little!
Hospitalisation may be associated with a worse physical health prognosis

Performance improved with contact with primary care!

- Eye Exam: 33.4 NO INPT, 25.7 MH INPT
- Lipids: 59.7 NO INPT, 42.9 MH INPT
- HbA1c: 48.8 NO INPT, 41.9 MH INPT

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Issues in institutions – UK prisons 1992

- Prevalence higher than general population
- Issues with timing of medication and self care mainly due to lack of autonomy
- Many had defaulted from usual care and felt that imprisonment offered a useful opportunity to reengage
Recognised that specialist input supported by care on the ground can improve outcomes
High Security Hospital – UK 2004

- Point prevalence $35/408 = 8.5\%$
- Mean Hba1c $7.9\%[5.6-12]$
- All type 2 with 28% on insulin
- 90% smokers
- Significant burden of complications
Cohort under care for 22/12 months

- 9% mortality [2/22]
- Mean age 45 [27-67]
- Hba1c 8.5% “maintained over the study”
- 40% on insulin including 5 patients who started in the period of follow up with support from local diabetologist
Does physical and mental health teams working together improve care?

- Patients in the community under a CMHT, the north Westminster experience.
- Referrals identified and discussed in MDT
- Appointments shared with CPN, support workers
- Post review discussion in joint MDT
- High levels of healthcare professional satisfaction

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# Year 1 exp N= 36

<table>
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<tr>
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<th>Mean</th>
<th>Range</th>
<th>% on Tx</th>
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<tbody>
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<td>Hba1c [mmol/mol]</td>
<td>69</td>
<td>39-116</td>
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<td>Cholesterol [mmol/l]</td>
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<td>2.39-9.01</td>
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<td>BP SYS</td>
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<tr>
<td>Retinal Screening</td>
<td></td>
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<td>61</td>
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77% of those referred attended for 2 or more appointments

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Injectable treatments are particularly challenging in this cohort.

P = 0.04

- **Hba1c**
  - Insulin
  - OHA alone

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Psychological insulin resistance

- Health beliefs
- Needle anxiety
- Fear of Hypos
- Fear of weight gain
- Fear of social rejection
Are there any existing Guidelines – ADA “correctional institutions” 2010

• Care should be delivered in a way that meets national standards
• Should have written policies and procedures for the management of diabetes and for training of medical and correctional staff in diabetes care practices
• Nutrition counseling is considered an essential component of diabetes self management
• All patients should have access to prompt treatment of hypo and hyperglycemia.
• Policies and procedures for CGM need to be in place
Focus on intake screening

Rapid Identification of all insulin treated patients

All have CBG within 1-2 hours of arrival

Complete medical history and physical examination in a timely manner

Ensure medical and nutritional interventions continued without interruption

All patients should have a management plan with individualized goal setting

Individuals who at risk of DKA should be identified

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Hypo awareness- CBG immediately

- Altered mental status
- Agitation
- Combativeness
- Appearance of intoxication
Self care

• Individuals with diabetes assume as active a role in their care as possible

• Patient self management should be emphasized and the management plan should encourage the involvement in problem solving as much as possible
Transfer and discharge

- A transfer summary should be completed along with the patient
- Diabetes supplies should also accompany the patient
- Discharge planning should include an update re education and self care
- Diabetes follow should be arranged.
Challenges in providing diabetes care in a secure hospital

- Complex nature of diabetes care
- Medication for mental health disorder
- Impact of behaviour and manipulation
- Out of hours care
- Practicalities of arranging specialist review
Ealing Site – Medium/ Low secure

- 300 patients
- Admission typically 1-2 years

- Primary Care unit on site
  - GP
  - Nurse Practitioner
  - Primary Care Nurses
  - Dietitian support
Virtual Ward Round

• Visit every two months
• Discuss the caseload and management issues
• Discuss recent developments
• Discuss procedures and policies
• Problem

• 47 year old insulin treated type 2 diabetes
• Recurrent refusal of insulin especially at evenings and weekends
• Coupled with high sugar drinks blood glucose would increase to 20 mmol/l to HI.
• Recurrent discussion with Medical SpR on call and confrontation with staff/ transfer to A&E
Discussion and solution

• Specific care plan put in place about differentiation between poorly controlled diabetes [not an emergency] and diabetes emergency.

• Support for OOH psychiatry cover
Outcomes

- Significant reduction in number of A&E attendances
- Fall in Hba1c by 18mmol/mol
Care in Action – case 2

• The problem

• Prolonged hypo and failure to rescue without transfer to Ealing hospital
Discussion and solution

• Review of PGD for hypos
• Share of policies and procedures used at Imperial for local modification and implementation
• Review of stock and emergency items