IMPACT: An integrated health model for responding to frequent ED attenders with substance use disorders

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Background

- Substance use disorders are common amongst frequent attenders to emergency departments (ED).

- Up to 35% of presentations overall (Charalambous 2002; Indig et al 2010; Rivara et al 1993)

- A systematic review of frequent ED users (LaCalle et al 2010) indicated that frequent users comprise 4.5%-8% of all ED patients but account for 21%-28% of all visits.

- No existing capacity for assertive follow-up of referrals to community-based services such as primary care, D&A, Mental Health Services.

- There have been few attempts to systematically respond to such individuals outside of hospital.
IMPACT: Overview

- Integrated Management Pathways for Alcohol and drug Clients into Treatment assertive case management program.

- Pilot funding through SESLHD Innovation in Integrated Care grant funding, established by SESLHD D&A Services in collaboration with other stakeholders

- IMPACT aimed to respond to frequent ED attenders at Prince of Wales and Sydney Hospitals by
  - extending D&A hospital based services (consultation liaison – CL) to 7 days per week, and by
  - establishing an assertive outreach case management model staffed by 2 fulltime social workers + 0.1FTE D&A specialist.
IMPACT: Aims

- To reduce preventable hospital presentations (ED & admissions) for participating patients.
  - Eligibility criteria for IMPACT program:
    - Attended SESLHD EDs 5+ times in previous 12m;
    - SUD contributing to presentations;
    - Patient not already engaged in another program.

- To enhance participation in community based D&A, health and welfare services for patients.

- To improve substance use, general health and welfare outcomes of patients over time.

- To establish, evaluate and refine a model of care that could be disseminated to other sites.
Evaluating the IMPACT service

- We present evaluation of the first 15 months of intake, from October 2014 to December 2015.

- Pre-post evaluation compared presentations in the 6 months before and 6 months after IMPACT, general health and welfare.

- Measures:
  - Preventable ED presentations (if quality community/primary care had been available).
  - SUD/non-SUD hospital admissions (by principal diagnosis).
  - Clinician Global Impression –Improvement Scale: clinicians globally rated the level of improvement on 7-point scale
  - Australian Treatment Outcomes Profile – a validated clinical outcome monitoring tool that assesses outcomes in the preceding 4 weeks
Results: Enrolment

- **Referred**: 114
- **Eligible**: 74
- **Engaged**: 42

**Intervention**: Time on IMPACT Program was mean 5 months

n=28 clients completed episode as per treatment plan
Results: Demographics

- Of the 42 engaged clients:
  - Mean age: 45 years
  - Women: 62%
  - Men: 38%
  - Alcohol: 64%
  - Other: 36%

- ATOP Measure (last 28 days):
  - Days used primary substance ($mean \pm SD$): 18 ± 9
  - Psychological health (0-10; $mean \pm SD$): 5.0 ± 2.3
  - Physical health (0-10; $mean \pm SD$): 5.1 ± 2.3
  - Quality of life (0-10; $mean \pm SD$): 4.7 ± 2.3
  - Homeless/at risk (n, %): 7 (23)
  - Arrested (n, %): 3 (10)
  - Any violence (n, %): 10 (33)
  - Any work/training (n, %): 5 (17)
Results: ED and Hospital data

ED presentations and hospital admissions (engaged)
Results: Clinician Global Impression Scale - Improvement

- Consensus ratings by both social workers and D&A specialist
- Collapsed to 3-point ratings

- Improved 52%
- Stayed same 26%
- Worse 20%
Discussion and conclusions

- Results demonstrate a decrease in ED visits and hospital admissions, improvement in health, and good retention in the program.
- IMPACT is an example of a service model that transitions patient care from hospital to community settings to reduce the burden upon hospital systems.
- Integrated care principles support the development of more efficient and effective models of responding to individuals with significant D&A problems that transitions the focus of care from hospital to community settings.
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