

Domiciliary Care and Hospital Discharges

Evidence from the Care City Cohort



Introduction

Partners across Barking and Dagenham (B&D) have supported the creation of the Care City Cohort linked dataset. The individual linked dataset brings together information from health services and council, using the dataset, we want to understand the variables associated with higher / lower use of health and social care services across five settings of care (Acute Care, Mental Health, Primary Care, Community Care and Social Care).

With an increasing need for domiciliary care after a hospital admission, the Care City Cohort has been used to highlight the key themes linked between domiciliary care packages and a hospital discharge.



Key messages

- **One in three domiciliary care packages start in the week after a hospital discharge.** In 2018/19 and 2019/20, 632/1704 (37%) of new packages started in the week after a hospital discharge. This is twenty times the rate of new packages at other times.
- **There are arguably two types of admission preceding domiciliary care packages; those where the need is new and those where the need is relatively long-standing.** Life-changing illnesses such as fractured femur or stroke are most predictive of domiciliary care, but these admissions are relatively uncommon. Admissions for acute frailty-related illnesses such as urinary tract infections (UTI) and Chronic Obstructive Pulmonary Disease (COPD), exacerbations are more common, and many domiciliary care packages follow such admissions. This may reflect two different types of client: those where the admission represents a new need for domiciliary care, and those where the admission identifies an existing need.
- **Patients who receive a domiciliary care package after discharge tend to be older people discharged after longer admissions.** Among people with an existing domiciliary care package in 2018/19 and 2020, the median duration of hospital stay is 2 days. This compares to 10 days for admissions where a new domiciliary care package followed discharge.
- **Domiciliary care packages that follow hospital admissions are more likely to be long-term packages.** Comparing packages that start in the week after a hospital discharge with other packages, those after a hospital discharge were 1.4 times more likely to be 90 days or more.

Number and rate of new domiciliary care packages according to proximity to hospital discharge

Week after hospital admission	Person-time (weeks)	Number of new packages	Rate per 1000 weeks
Yes	4,786	632	132
No	156,753	1,072	7
Total	161,539	1,704	11

Number of hospital admissions in 2018/19 and 2019/20 among people aged 20+ in LBB, and the number of new domiciliary care packages in the week after discharge

Top 10 ranked by new packages. 'Acute frailty-related illnesses' are highlighted.

Primary cause of admission (ICD-10)	Admissions	New packages	Expected packages*	Ratio
Fracture of femur (S72)	276	47	7.8	6.0 (4.4-8.0)
Pneumonia (J18)	1,193	38	25	1.5 (1.1-2.1)
MSK symptoms (R29)	432	31	13.5	2.3 (1.6-3.3)
UTI (N39)	809	27	17.6	1.5 (1.0-2.2)
Stroke (I63)	280	26	5.4	4.8 (3.2-7.1)
COPD (J44)	794	22	15.2	1.4 (0.9-2.2)
Sepsis (A41)	649	22	12.5	1.8 (1.1-2.7)
Coxarthrosis (M16)	303	19	4.2	4.6 (2.7-7.1)
Heart failure (I50)	499	16	12	1.3 (0.8-2.2)
Acute renal failure (N17)	369	16	8.5	1.9 (1.1-3.0)

*The expected number is calculated from the proportion of admissions with new packages by age group in the entire dataset

Methodology notes

- This analysis uses the 'Care City cohort', a resource of linked local authority and health datasets (LINK), using two parts of the dataset: admitted patient care (Hospital Episode Statistics) and adult social care data.
- We included residents of Barking and Dagenham aged 20+ at 1 April 2018.
- Within this population, we studied all 66,910 hospital admissions in 2018/19 and 2019/20.
- Domiciliary care packages are defined as adult social care packages with types: 'Homecare', 'Crisis Homecare Discharge (Double Handed)', 'Crisis Intervention', 'Homecare (Double Handed)', 'Crisis Intervention (Double Handed)', 'Crisis Homecare Discharge', 'Homecare (Spot)', 'Crisis Homecare Hospital Avoidance (Double Handed)', 'Crisis Homecare Hospital Avoidance'.
- We merged overlapping packages and those with gaps of less than 30 days, to calculate start and end dates of domiciliary care spells.
- We identified 'hospital associated' domiciliary care packages as those starting in the 7 days after a hospital discharge.



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