

The cost of transferring a patient on nurses and nursing work

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Background

Nursing workforce shortages

Health Services



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Strategies to Promote Patient Flow

Short-stay units

Transit lounges

Winter beds

Admit & transfer

National Emergency Access Target (NEAT)

Outliers

Hot-bedding

Bedspace moves











Impact on Nurses Workload

Impact on nurse time primarily unknown

- Multiple study techniques with focus on nursing work
 - activities not timed
 - timing results not published
 - focus on transporting patient











Aim

To explore the impact of transferring patients on medical-surgical nurses and nursing

Site/setting

Stage1: 500 bed tertiary referral hospital, Sydney Australia, all inpatient wards and units

Stage 2: one medical and one surgical ward with high rate of moves as identified in stage 1











Design/method

Stage1

Retrospective analysis health administrative data Sydney metropolitan hospital, for patients remaining 48 hours or more.

Stage 2

Development of Transfer Timing Tool Observational timing study (118hrs 7wks) Field notes











Development of Transfer Timing Tool

27 transfer activities identified from peer reviewed & grey literature (n=47)

14 sending transfers (15 pilot)

13 receiving transfers (15 pilot)

Validity

Four expert clinicians Practice observational timing

Activities divided into 6 categories (Administration, Communication, Direct care, Documentation, Indirect care & Other)











Observational Timing Method

Transfers observed as either sending or receiving transfer

Sending: from bed confirmation, until nurse relinquished care

Receiving: from point when receiving nurse took responsibility for patient's care until nurse indicated that transfer complete

Bedspace moves observed as complete process











Stage 1 Findings

Hospital data 10,733 patients, 14,157 episodes of care

34,715 moves 27,142 transfers 7,573 bedspace moves

Mean 2.5 moves (+1.87, 0-12)











Stage 2 Findings

75 movements

68% (n=51) clinical reasons

32% (n=24) nonclinical reasons

Non-clinical Reasons













Time to transfer













Frequency of Nursing activities













Mean Time Spent by Activity Category



Mean (Selected) Activity Times



Direct care activities

- Nurse escort 18.8 mins (+16.52)
- Patient preparation 6.6 mins (+17.83)

Communication

- Telephone handover 3.2 mins (+ 2.13)
- Direct handover 2.3 mins (± 1.72)

Documentation 1.7 mins (+ 1.37)

Administration Compile medical records/charts 2.6 mins (\pm 6.07) Update info systems 0.9 mins (\pm 0.6)









Mean Activity Times



Other Prepare/make bed 1.7 mins (<u>+</u>1.35) Move bed/equipment 1.5 mins (<u>+</u> 3.70)

Indirect care Pack/unpack belongings 2.7 mins (<u>+</u> 3.0) Move bedside locker/table 0.8 mins (<u>+</u> 0.64)



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Nurse Time

Nurse time mean 19.6 mins

Sending TF 17.7 mins (\pm 14.59) Receiving TF 24.6 (\pm 16.91) Bedspace move 11.2 (\pm 15.01) ANOVA (p = .017)

Medical nurse 21.0 mins Surgical nurse 17.6 mins

Mean Number of Nurses: 2.0 (+0.8)











Implications

Moving patients costly on nurse time

- equivalent to 600 hrs or 25 days p/month
- 3.9 Full-time Equivalent (FTE) medicalsurgical nurses

Some activities could be delegated to others

- >53% beds, bedside lockers & tables moved by RNs
- financial benefit to employing more orderlies/ward assistants (Farris et al. 2010)











Hidden 'costs' of patient moves

Several simultaneous moves - mix up with bedside tables

Despite presence of ward clerk, nurses may compile patient notes











Conclusion

- Almost 1/3 patient moves were not clinically based and could be avoided
- Moving patients is costly in terms of nursing work, nurses' time and nursing leadership
- Confirming nurses' opinions (Bruyneel et al. 2013) some activities could be performed by others











References

Blay, N., Duffield, C. M., & Gallagher, R. (2012). Patient transfers in Australia: implications for nursing workload and patient outcomes. Journal of Nursing Management, 20(3), 302-310

- Blay, N., Roche, M., Duffield, C. & Gallagher, R. 2017, 'Intra-hospital transfers and the Impact on Nursing Workload', Journal of Clinical Nursing; 6(23-24), 4822-4829
- Bruyneel, L., Li, B., Aiken, L., Lesaffre, E., Van den Heede, K. & Sermeus,
 W. (2013). 'A multi-country perspective on nurses' tasks below their skill level: Reports from domestically trained nurses and foreign trained nurses from developing countries', International Journal of Nursing Studies, 50(2), 202-209
- Farris, J. A., Matis, T. I., McAllister, M., & Snider, A. (2010). 'Applying healthcare systems engineering methods to the patient discharge process', International Journal of Collaborative Enterprise, 1(3/4), 293-315











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