Transitions

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“Not in his goals, but in his transitions is man great.”
—Ralph Waldo Emerson (1803–1882)

Over the past decade there has been increased awareness that many of the problems in providing high-quality medical care occur during transition.1–10 It is essential that the receiving health team has accurate information concerning the patient’s medications, advance directives, allergies, and previous medical history. There has been recognition that communication between nursing homes and emergency departments is particularly bad.2 In early studies it was found that at least 20% of persons discharged from hospital to home have an adverse event.11 Two-thirds of these were because of inappropriate drugs being taken on returning home. In another study, it was found that pending test results on discharge from hospital were not made available to the physician.12 Findings such as these led to a consensus statement from the American College of Physicians, Society of General Internal Medicine, Society of Hospital Medicine, American Geriatrics Society, American College of Emergency Physicians, and Society for Academic Emergency Medicine that highlighted the need for improving transitions of care.13 It is important to recognize that transitions occur both between different health professionals and different facilities, as well as, in the case of the “snowbirds,” often facilities and health professionals in different states (Figure 1).

Historically, physicians have depended on the patient to provide an appropriate background history and a list of current medications. For frail patients14–19 or those with cognitive impairment20–23 or persons who are depressed,24–26 this is unrealistic. Recently it has been realized that older persons with diabetes mellitus often have large gaps in their knowledge concerning their care plan.27–32

MEDICATION RECONCILIATION

Polypharmacy is rampant in nursing homes, with more than 60% of nursing homes residents receiving 9 or more medications.33–36 Mathematical modeling has shown that more than 5 medications in older frail individuals is associated with a marked increase in drug-induced side effects, regardless of the perceived necessity of the medication.37 Medications are a major cause of falls.38–41 Anticholinergic medications increase cognitive dysfunction,42,43 Antipsychotic medications increase mortality and have a variety of side effects.44–46 There is little evidence to support the use of antidementia medicines in most nursing home residents.47–49 Overtreatment of hypertension has no benefits and increases side effects.50–53 A recent study found minimal benefit in increasing the dosage of statins or adding a medication for the treatment of hyperlipidemia.54

The reason(s) for this rampant polypharmacy can be closely linked to the use of specialists and the slavish adherence to guidelines that are inappropriate for nursing home residents.55–57 Added to this is the tendency for more drugs to be started in hospital for questionable reasons.

Despite all these reasons for polypharmacy, it is essential that medication reconciliation takes place during all transitions. This is particularly important when the person is going from an institution to home. All transitions should be accompanied by a legible list of medications and dosages. This simple strategy of a medication list is one of the most powerful tools to decrease errors during transitions.58 The list should also provide the reason for the medication and whether or not the person has any allergies. When discharged home, a nurse follow-up within 24 to 48 hours can markedly reduce medication errors if the medication list is available.59,60

PALLIATIVE CARE

Although we all recognize the importance of advanced directives, it is amazing how often they fail to transfer with the patient or even when they do, how they are poorly followed. The development of palliative care and hospice programs has to some extent decreased transitions and improved communication when transitions need to occur.61–66 Hospice programs tend to enhance satisfaction while decreasing costs.

SYNDROMES AND TRANSITIONS

Subsyndromal and full-blown delirium are a common cause of transfer from nursing homes to hospital.67–71 Early recognition of delirium and focusing on the multifactorial nature of its pathophysiology should help to decrease transitions. Transitions are particularly problematic for persons with cognitive impairment.

Aggressive behaviors are another common reason for transfer.72–82 Development of appropriate behavior management programs in nursing homes can reduce these transitions.
Dehydration is commonly missed until late in nursing home residents.\textsuperscript{83,84} The use of subcutaneous fluid replacement can substantially reduce the need for transfer.\textsuperscript{85,86}

Malnutrition is another situation that makes residents vulnerable for developing pressure ulcers and infections leading to the need for transfer to the hospital.\textsuperscript{87–96} Appropriate management of the causes of anorexia can lead to a decrease in the need for transfers.\textsuperscript{97–99} Indwelling urinary catheters should also be avoided.\textsuperscript{100}

Careful management of coumadin dosing together with an appropriate flow sheet in the chart can further decrease the need for transfers.\textsuperscript{101,102} Recognition that an INR up to 7 without bleeding does not necessitate a transfer is also important.

Use of vitamin D to prevent falls and hip fracture should also reduce transitions.\textsuperscript{103–114}

**PROGRAM FOR ALL-INCLUSIVE CARE FOR ELDERLY (PACE)**

PACE programs have been developed to keep persons at home and out of nursing homes.\textsuperscript{115} This example of a medical home tends to make for less use of transitions of care than nursing homes, leading to a marked reduction in costs. Median survival in the PACE program was 4.5 years compared with 3.5 years for equivalent persons in a community choices (waiver) program and 2.3 years for nursing home residents.\textsuperscript{116} This suggests that an incentivized management program can decrease costs and reduce transitions.

**CONCLUSION**

Improving hand-offs during transitions of care and reducing transitions represent a major need to enhance quality of care in nursing homes.\textsuperscript{117–119} Rapid cycles should be regularly carried out to investigate the causes of transitions, how to prevent them, and to improve communication.\textsuperscript{117,120}

Simple approaches to improving transitions appear to be most effective. This includes the following:

- A clear medication list to go with the patient
- A clear and enforceable advanced directive to go with the patient
- Communication between both nurses and physicians at both sites
- Clear lines of responsibility for transitions
- Measurement of successfulness of communication and outcomes using a continuous quality improvement system
- Approaches need to become more patient centered
- A universal electronic patient record accessible by all caregivers would be ideal\textsuperscript{121}

For those interested in keeping abreast of the transitions field, the following Web sites are recommended:

- National Transitions of Care Coalition (www.ntocc.org)
- The Care Transitions Program (www.caretransitions.org)
- The Care Transitions Quality Improvement Organization Support Center (www.cfmc.org/caretransitions)
REFERENCES


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610 Morley JAMDA – November 2010