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How may medication adherence by patients be improved?

Background facts found:

- As much as an estimated 33% to 69% of medication related hospital admissions is accounted for by poor medication adherence.
- 26% to 59% of older adults do not adhere to medication instruction ("Behavior Changing Strategies May Improve Medical Adherence," 2009)
- Vision changes in older patients make reading the instructions on bottles more difficult, and arthritis can make handling the medication containers cumbersome or painful. ("Behavior Changing Strategies May Improve Medical Adherence," 2009)
- Costs about \$100 billion (Osterberg L and Blaschke L. *N Engl J Med.* 2005;353[5]: 487-497).
- Patients seeing a primary care provider as well as one or more specialists may be on a host of medications that they do not fully understand, and thus fail to make all of their care providers aware of.
- "The five most common types of nonadherence with medication are: 1) failing to have a prescription filled, (2) taking an incomplete dose,(3) taking the medication at the wrong time, (4) forgetting to take one or more medications, and(5) stopping the medication. Each of these behaviors requires individual consideration in order to formulate strategies to enhance patient compliance." (Lester Breslow, 2002)

Resulting Consequences:

- Premature deaths
- Reduced quality of life
- Increased patient and physician frustration
- Skewed findings for clinical research
- Incomplete care plan across the continuum of care
- Missed identification of possible adverse drug reactions (drug/drug, drug/food, drug/allergy)

Possible solutions (some from the noted study by RAND Health) are:

- Cost-sharing – when higher copayments are required lower adherence is shown to exist. Cost sharing would help subsidize the financial burden on patients to lower their copay amount in circumstances where significant health or financial improvement can be realized which would help to avoid decrease future complications, functional decline or more-expensive future treatments.
- Regimen Complexity – Through making treatment regimens less complex it will become less burdensome for a patient to follow the recommended course of treatment. "Effective strategies include reducing the number of doses taken daily, prescribing medications so they can be taken at the same time as other medications, and

encouraging the use of pill boxes." ("Behavior Changing Strategies May Improve Medical Adherence," 2009)

- Medication Beliefs – Through better written literature, patients can become better educated on their medications. Policy options through providers will also need to be influenced through public policy to introduce greater flexibility for medications. The idea of “one-size-fits-all programs are unlikely to work”
- Depression (in patients with diabetes) – proposed to be addressed in the same manner as medication beliefs.
- Utilization of regional and eventually national Health Information Exchanges (HIE) will allow for the consolidation of electronic medication lists. Ultimately giving patients electronic access to this “master medication list” through Personal Health Records and providing additional targeted medication information will improve general knowledge and adherence to a medication regimen.
- Further utilizing Home Health services to updated electronic medication lists (through HIE) will reconcile the difference between what the patient has been prescribed and their actual adherence. This may allow for alteration of the care plan by the primary care or specialty providers; at minimum some intervention may be performed and education provided to the patient.

Also along with the above, the RAND health states the following and I take directly from the study.

- A research agenda that addresses the shortcomings in the current literature would be helpful to guide the policy agenda.
- Potential policy solutions that address one barrier must not worsen another—for example, programs that lessen regimen complexity should not also increase cost-sharing.
- Researchers and policymakers must be clear about the type of adherence they are addressing, since adherence is a multistep process, from being prescribed the correct medication, to filling the prescription, to continuing to take the medication, to taking the medication as directed.
- Programs for improving adherence must find a balance between “customized” interventions to address individual barriers and effective programs that work for large groups or classes of patients.

References

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