Health Literacy and Safety of Care Transitions

(Perspective of Physician/Researcher)

"What am I Supposed to do Now?"

(Perspective of Patient)

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and a Patient

LSU Louisiana State University HEALTH SCIENCES CENTER SHREVEPORT

Context

(I should have proficient health literacy skills)

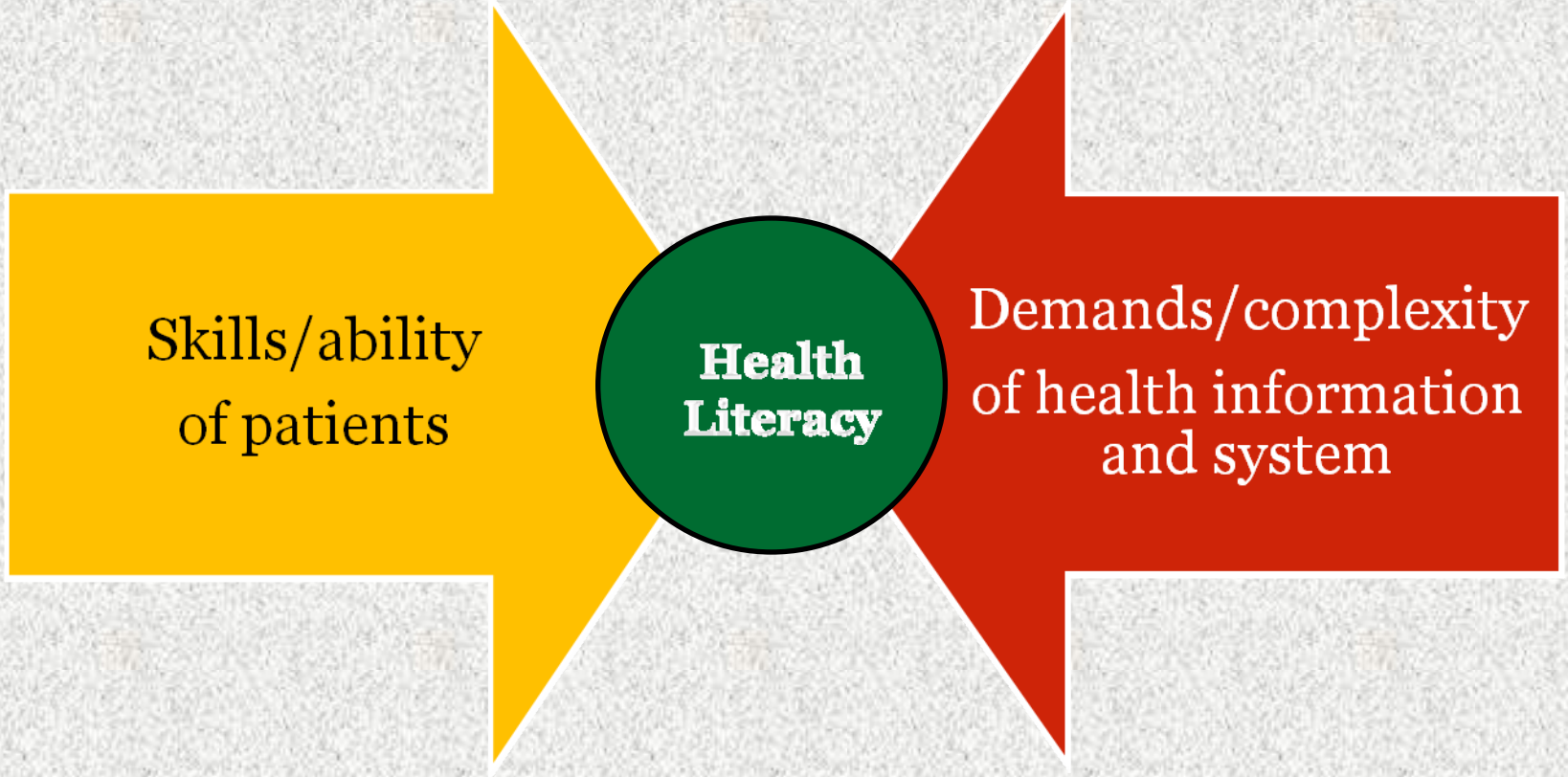
- I have been on faculty of a medical school for 30 years
- Conducted research in health literacy for 20 years
- Taught med students, residents, and all sorts of health professionals practical strategies to improve oral and written communication
- Attended a million grand rounds and noon conferences

What I Learned on my 2007 Summer Vacation and in the following years



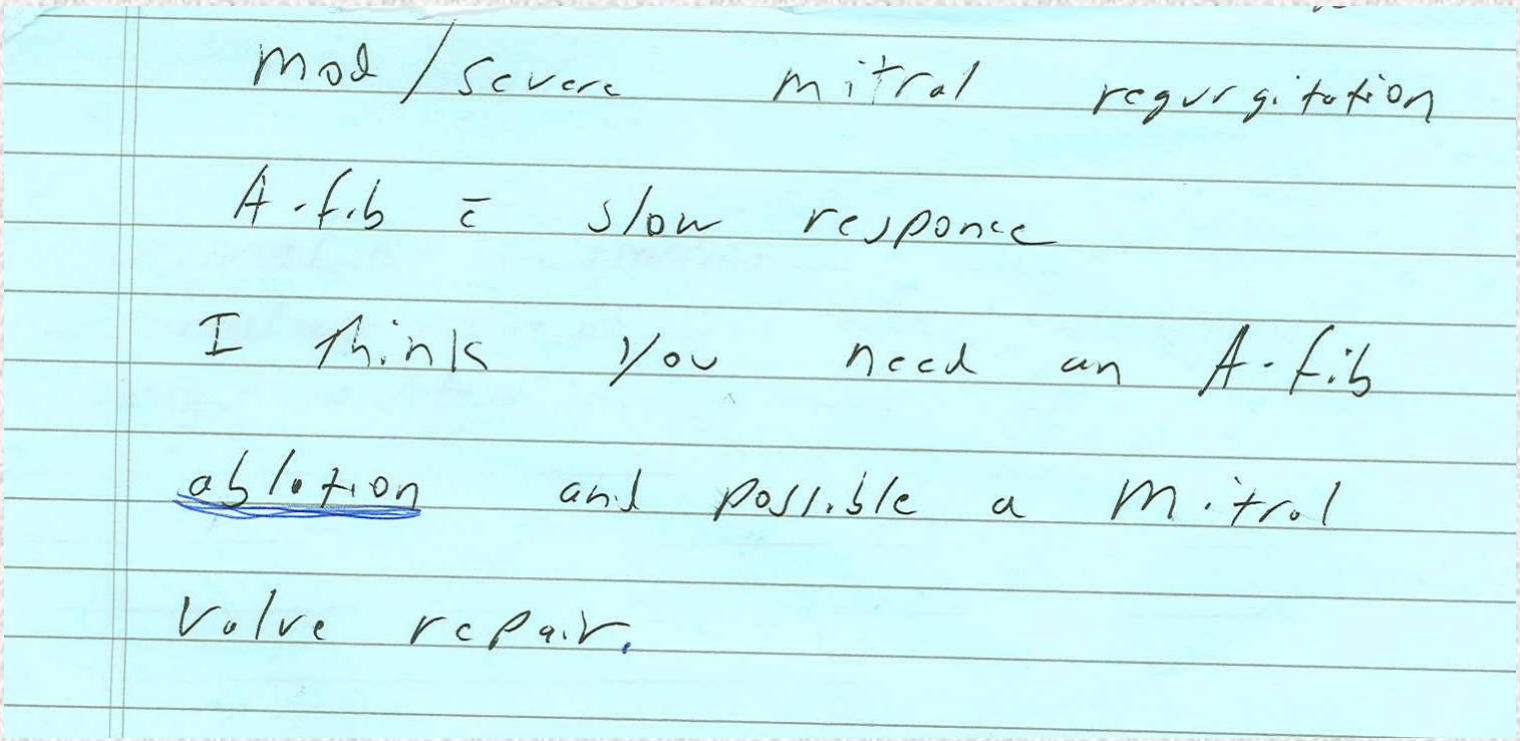
A Health Literacy Expert Has A Taste Of Her Own Medicine

As a Patient, Health Literacy was an Issue



Before I was “a patient” I took no Rx or OTC meds and had never missed a day of work due to illness in 27 years.

When diagnosed, I had to ask cardiologist to write down "What's my problem? What do you think I need to do?"



Cardiologist's Note

Trip to a Mecca for Mitral Valve Surgery

Pre-surgery was patient centered

- All pre-surgery appts and procedures were in 1 day – timed perfectly
- Surgeon met with entire family (1 hr)
- Explained problem and remedy in terms my family and I could understand (door + frame)
- Patiently answered all our questions (my children had several)





Discharge Rushed, Hospital-Centered

- Seemed like a check-off
- Nurse sped through list of 8 meds (5 min?)
- I was lost/overwhelmed as she breezed through list
- I looked at my husband, saying with my eyes “I hope you are getting this”
- Nurse seemed irritated when I asked her what each medicine was for (she did not write it down).



Medication Instructions Not Clear to Professor of Medicine



As a medication virgin:

- Drug names were strange/not useful.
- I felt unsure of instructions.
- Nurse was unaware she was going too fast with routine discharge instructions that were not familiar to me.
- I was too overwhelmed and embarrassed to ask all the questions I needed to ask.

Medication	Sig	Dispense	Refills
atorvastatin (LIPITOR) 20 mg ORAL Tab	Take one(1) tablet daily.		0/0
Aspirin 81 mg ORAL Tab	Take one(1) tablet daily.	0	0/0
warfarin (COUMADIN) 10 mg ORAL Tab	10mg at night or as directed	30	0/0
spironolactone (ALDACTONE) 25 mg ORAL Tab	Take one(1) tablet daily for 1 month	30	0/0
ascorbic acid (VITAMIN C) 500 mg ORAL Tab	1 tablet twice a day for 1 month	60	0/0
Omeprazole Magnesium (PRILOSEC OTC) 20 mg ORAL TbEC	Take one(1) tablet daily for 2 weeks	0	0/0
lisinopril 5 mg ORAL Tab	Take one(1) tablet daily.	30	0/0
furosemide (LASIX) 40 mg ORAL Tab	Take one(1) tablet daily for 1 week then daily as needed for 1 week	14	0/0
acetaminophen (TYLENOL) 325 mg ORAL Tab	Take two(2) tablets every four(4) to six(6) hours as needed for pain.	0	0/0
oxycodone-acetaminophen (PERCOCET) 5-325 mg ORAL Tab	1 to 2 tablet as needed severe pain not to exceed 12 in 24 hour	40	0/0

Why Am I Taking These?
When and How Long Do I Take Them?

spironolactone (ALDACTONE) 25 mg ORAL Tab	Take one(1) tablet daily for 1 month	30
Omeprazole Magnesium (PRILOSEC OTC) 20 mg ORAL TbEC	Take one(1) tablet daily for 2 weeks	
lisinopril 5 mg ORAL Tab	Take one(1) tablet daily.	30
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Coumadin Labels Varied

May not state current instructions.
Only 1 said “take at night.”





“Take 1 tab (10 mg) by mouth once daily except Tuesday and Thursday; 1 & ½ tabs (15 mg) once daily on Tues/Thursday”

Coumadin Conundrum
Night of Discharge

Warfarin bottle said "*Take at night",* but I had been given *all my meds* before d/c at noon

- I called the Mecca, got charge nurse: *Was I given this before discharge at noon?*
- She said "I'll check the computer. Oops– you are no longer in computer."
- *What should I do?*
- "I can't tell you except we usually give this at night."

How Do I Space Out Pain Meds?

oxycodone-acetaminophen (PERCOCET) 5-325 mg ORAL Tab	1 to 2 tablet as needed severe pain not to exceed 12 in 24 hour	40
acetaminophen (TYLENOL) 325 mg ORAL Tab	Take two(2) tablets every four(4) to six(6) hours as needed for pain.	0



Which Tylenol?

Do I Need Health Literacy Skills to Take Tylenol?

- Does it make a difference which Tylenol? (Wal-Mart has 80 sq. feet of pain meds)
- Does it matter how much per dose/day?
- I never read max daily dose warning
- D/C instructions said “Take 2 pills” -- but previously with Advil I took 1 or 3
- I did not see active ingredient or realize its importance



Drug Facts

Active ingredient (in each tablet) Purpose
Acetaminophen 325 mg.....Pain reliever/fever reducer

Uses
- temporarily relieves minor aches and pains due to:
  - headache
  - muscular aches
  - backache
  - minor pain of arthritis
  - the common cold
  - toothache
  - premenstrual and menstrual cramps
- temporarily reduces fever

Warnings

Alcohol warning: If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take acetaminophen or other pain relievers or fever reducers. Acetaminophen may cause liver damage.

Do not use with any other product containing acetaminophen

Stop use and ask a doctor if
- pain gets worse or lasts for more than 10 days
- fever gets worse or lasts for more than 3 days
- new symptoms occur
- redness or swelling is present

These could be signs of a serious condition.

If pregnant or breast-feeding, ask a health professional before use.

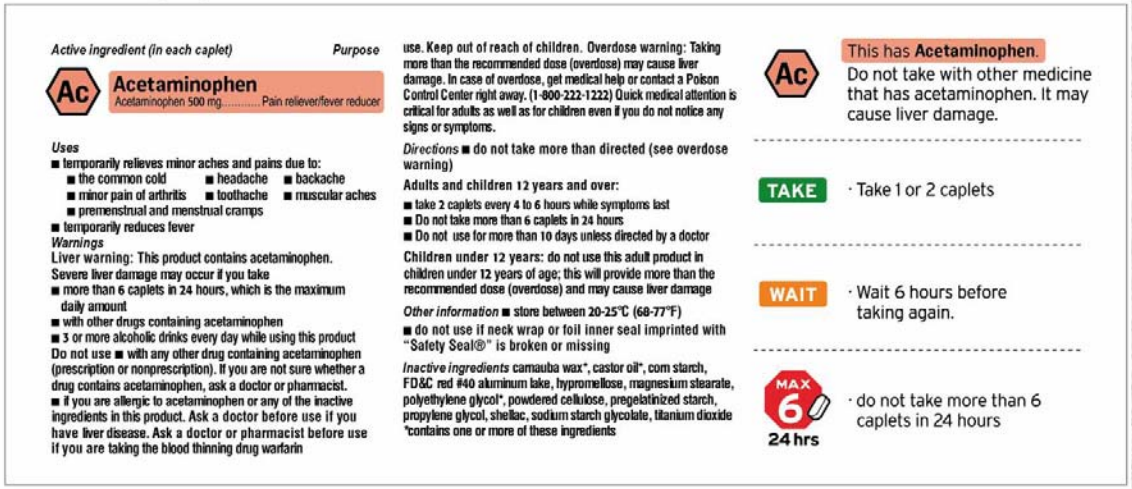
Keep out of reach of children.

Overdose warning: Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help or contact a Poison Control Center right away. (1-800-222-1222) Quick medical attention is critical for adults as well as for children even if you do not notice any signs or symptoms.

Recent OTC Research with Drs. Wolf & Parker

Few consumers aware of active ingredient

- Majority of consumers don't read OTC instructions
- People have their own schematic for taking OTCs
- No notable association between perception of safety and actual use
- **Would revised label increase awareness, understanding?**



Active ingredient (in each caplet) *Purpose*

Acetaminophen Acetaminophen 500 mg..... Pain reliever/fever reducer

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  - the common cold
  - headache
  - backache
  - minor pain of arthritis
  - toothache
  - muscular aches
  - premenstrual and menstrual cramps
- temporarily reduces fever

Warnings

Liver warning: This product contains acetaminophen. Severe liver damage may occur if you take
- more than 6 caplets in 24 hours, which is the maximum daily amount
- with other drugs containing acetaminophen
- 3 or more alcoholic drinks every day while using this product

Do not use ■ with any other drug containing acetaminophen (prescription or nonprescription). If you are not sure whether a drug contains acetaminophen, ask a doctor or pharmacist.
- if you are allergic to acetaminophen or any of the inactive ingredients in this product. Ask a doctor before use if you have liver disease. Ask a doctor or pharmacist before use if you are taking the blood thinning drug warfarin

use. Keep out of reach of children. Overdose warning: Taking more than the recommended dose (overdose) may cause liver damage. In case of overdose, get medical help or contact a Poison Control Center right away. (1-800-222-1222) Quick medical attention is critical for adults as well as for children even if you do not notice any signs or symptoms.

Directions ■ do not take more than directed (see overdose warning)

Adults and children 12 years and over:
- take 2 caplets every 4 to 6 hours while symptoms last
- Do not take more than 6 caplets in 24 hours
- Do not use for more than 10 days unless directed by a doctor

Children under 12 years: do not use this adult product in children under 12 years of age; this will provide more than the recommended dose (overdose) and may cause liver damage

Other information ■ store between 20-25°C (68-77°F)
- do not use if neck wrap or foil inner seal imprinted with "Safety Seal®" is broken or missing

Inactive ingredients camauba wax*, castor oil*, corn starch, FD&C red #40 aluminum lake, hypromellose, magnesium stearate, polyethylene glycol*, powdered cellulose, pregelatinized starch, propylene glycol, shellac, sodium starch glycolate, titanium dioxide
*contains one or more of these ingredients

This has **Acetaminophen**.
Do not take with other medicine that has acetaminophen. It may cause liver damage.

TAKE · Take 1 or 2 caplets

WAIT · Wait 6 hours before taking again.

MAX 6 24 hrs · do not take more than 6 caplets in 24 hours

Challenges When I Get Home:

What is strategy to keep all these meds straight?





More Challenges:
How Do I Tell These apart?



Warfarin and Lipitor

- I can’t discriminate between the pills
- I don’t have a workable plan
- My thinking and strength not 100%
- I feel vulnerable and overwhelmed

My *Alice in Wonderland* Moment:

What Else Can Be Wrong?



Osteoporosis

How can this be? I run, lift weights, and do yoga.

Osteoporosis

Rx: Calcium 2x Daily, Fosamax 1x/week,

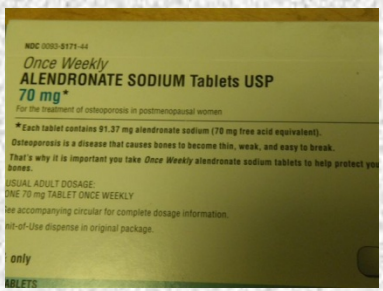
- How do I work this in my life
- I adjusted to a nighttime med "habit" – don't like to figure out adding morning pills
- I stumble into kitchen to have coffee first thing in the morning – don't want to wait 30 minutes to drink coffee

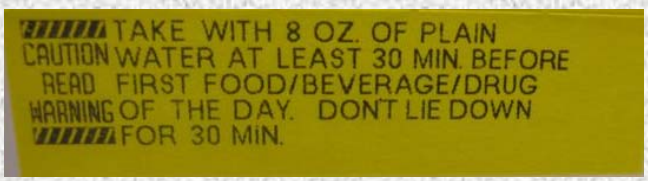


My Problem Solving: Magical Adherence Beliefs Around Fosamax



- **Instructions/warning**
  - Take with 8 oz of water at least 30 minutes before first food/beverage/drug of the day. Don't lie down for 30 minutes





- **My plan**
  - Drink some water
  - I can have coffee after 10 minutes
  - I will wait to drink orange juice/eat breakfast
  - I won't lie down for morning yoga stretches
  - I never take when traveling – so days vary

"Crazy Cousin Nancy"

The Internet Info Queen

- My cousin is a bright woman who lives on the internet; alternative medicine is her thing; she's retired, lives alone
- She is concerned about me and my prescription meds
- She sends me at least 2 e-mails daily about supplements, alternative cures for A-fib, mitral valve problems, high cholesterol, problems with Fosamax, acid in my urine, stress (soda in water daily), stop working so damn much – meditate more.

Lessons Learned

Post MI Focus Groups

- Many pts d/c after MI have never taken daily meds previously
- Some thought they needed to space all pills out (not take 2 together)
- New Rx means refills not synchronized, requiring multiple visits to pharmacy
- Some men did not take blood pressure pills the day they wanted to have sex
- Many said it's difficult to get a doctor on the phone
- At LSU – patient must return to clinic to discuss meds (some patients live 100 miles away)
- Tip: Make friends with the pharmacists



Health Literacy and Safety of Care at D/C Found in Urology Day Surgery

Lessons learned from husband's surgery

- RNs responded to Joint Commission recommendations
- Used "teach back" before surgery
- Created a 4 question "IQ test" given before d/c
- MDs had no clue nurses were doing this or how helpful it was

"IQ Test" Before D/C

- **If your prescription reads Ciprofloxin 1 tablet twice a day, you would take:**
  1. 2 tablets in the morning
  2. 2 tablets at bedtime
  3. 1 tablet in the morning and 1 tablet at bedtime
- **When should you stop taking your antibiotic?**
  1. When you feel better
  2. When you have taken all of your antibiotics
  3. After day 2
- **If you miss a dose of your prescription what should you do?**
  1. Skip that dose and get back on schedule
  2. Double up on the dose
  3. Take as soon as you remember unless it is almost time for your next dose
- **If you break out in a rash and have difficulty swallowing, you should:**
  1. Take another pill
  2. Ignore the symptoms
  3. Discontinue the medicine and call the doctor immediately

Patient signature: _____

Final Thoughts



- Hospital d/c is only tip of the iceberg
- Following d/c recommendations is a **process**
  - Understand treatment plan and benefit
  - Problem-solve to embed meds in everyday life (and travel)
  - Plan ahead (not run out, learn “the drill” at pharmacy)
  - Acquire confidence
  - Negotiate with insurance companies and accept their “ethos”

High literacy, assertiveness, and connections don’t guarantee adequate Rx, OTC understanding and confidence