## ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S PATIENT DATA BASE FORM

Demographic and Administrative Information						
Name: ES	Patient ID: 123-45-6789					
Address: 1143 Park Lane	Clinic Team: Blue					
Hastings, MN 55033	Primary Care Physician: Graham					
Date of Birth: 04/19/1940	Pharmacy: Walgreen's (Westview Dr.) Hastings, MN					
Height: 5'11" Weight: 145 lbs	Race: Caucasian					
Gender: Female	Religion: New Age					
Outdon't Citatio	Rengion, New Age					
History of Present Illness	Vitals & Other Tests					
	vitais & Other Tests					
	09/23/06 03/17/06 07/06/05 01/15/05 (today)					
ES presents to the family medicine clinic today for follow-up of a	BP 138/86 120/72 118/84 124/76					
recent hospitalization for a left hip fracture. Her fracture occurred	Pulse 75 74 70 65					
when she fell while walking her dog 6 weeks ago. She has had	Temp 98.6°F 98.2°F 99.0°F 98.6°F					
intermittent pain when ambulating (4 out of 10) in her left hip since	Resp 16 16 18 16					
then and has been feeling hopeless, extremely tired without being	Weight 145 lbs 155 lbs 150 lbs 152 lbs					
able to sleep, irritable, unwilling to participate in her normally	Height 5'11" 5'11" 5'11" 5'11"					
pleasurable activities with friends and family (i.e., knitting group,	BMI 20.2 21.6 20.9 21.2					
women luncheons, writing), and has less interest in eating. She has						
not had thoughts of suicide and is able to perform activities of daily						
living well with walker. Just prior to her hip fracture, she was very						
active in several women's groups, writing a children's book, and						
volunteered at the local hospital.						
Past Medical History	Chem 09/23/06 03/17/06 07/06/05 01/15/05					
T. 1 (10(0))	(today)					
Tobacco use (1960)	Na 137 140 144 140					
Mild-persistent asthma (1985)	K 3.8 3.9 4.0 3.8 Cl 98 99 98 100					
Menopause (1991) Major depression (1992)	Cl 98 99 98 100 CO <sub>2</sub> 26 24 24 25					
	BUN 15 12 12 10					
Dyslipidemia (2000)	SCr 0.9 1.0 0.8 0.9					
	FBG 96 86 76 90					
	HbA <sub>1c</sub> 5.4% 5.2% 5.0% 5.0%					
	Calcium 9.3 8.9 9.1 8.9					
	Albumin 3.9 4.0 4.2 4.0					
	AST 28 20 22 24					
	ALT 26 30 25 28					
	Total bili 0.8 0.8 0.7 0.8					
ing kanalagan dalam kanalagan dalam da	Direct bili 0.1 0.2 0.2 0.1					
	Central Bone Densitometry (DXA)					
Family History	8/12/06					
Family History Father: MI at age 52, deceased - colon cancer at age 84						
Father: MI at age 52, deceased - colon cancer at age 84	T-score:					
Father: MI at age 52, deceased - colon cancer at age 84 Mother: osteoporosis at age 75; deceased - pneumonia at age 87,	T-score:					
Father: MI at age 52, deceased - colon cancer at age 84  Mother: osteoporosis at age 75; deceased - pneumonia at age 87,  Sister: age 68; alive, hypertension, osteoarthritis	T-score: Left hip -2.8					
Father: MI at age 52, deceased - colon cancer at age 84 Mother: osteoporosis at age 75; deceased - pneumonia at age 87,	T-score: Left hip -2.8					

Social History	Fasting Lipids				
<u>Tobacco:</u> 0.5 ppd x 46 years; recently quit - since hospitalization		03/17/06	07/06/05	01/15/05	
ETOH: occasional	TC	230	240	280	
Illicit Drugs: none	Trig	140	160	200	
<u>Caffeine</u> : 3 cups coffee daily	HDL-C	49	52	58	
Occupation: retired; computer analyst	LDL-C	153	156	182	
Status: divorced					
Children: 2 daughters, 1 son; 1 grandchild	Other Tests				
Physical Activity: walked dog 3 miles daily and rode bicycle 30		03/17/06	01/15/05		
minutes three times weekly until fracture occurred	Thyroid	1.8	1.9		
<u>Diet</u> : low sodium; eats out twice weekly	Stimulating				
	Hormone				
	Hamilton	09/23/06	01/15/05		
	Rating Scale	20	7		
	for Depressio	n			
	(HAM-D)		· · · · · · · · · · · · · · · · · · ·	··	
Procedures	X-ray				
Appendectomy (1950)	8/12/06				
Open Reduction Internal Fixation – left hip (2006)	Positive left h	nip (proxim	al femur) frac	cture	

## Physical Exam (09/23/06)

Healthy female appearing to be older than stated age and using a walker. VITALS: BP 138/86 (136/86 when repeated); HR 75; T 98.6; RR 16

SKIN: overall dry but intact

HEENT: PERRLA, neck supple, thyroid palpated with no mass noted

BREASTS: normal, patient performs self-breast examinations LUNGS: clear bilaterally with no wheezing, no rhonchi, no rales

CARDIOVASCULAR: normal rate, rhythm, no gallops or murmurs noted

ABDOMEN: normal

GENITOURINARY: patient deferred

RECTAL: patient deferred

EXTREMITIES: no pitting edema, skin intact with no ulcerations, left hip ROM limited  $-20^{\circ}$  hip flexion with some pain (as

expected with healing fracture) upon internal and external rotation, feet have appropriate sensation and blood flow

NEUROLOGICAL: cranial nerves II – XII intact, deep tendon reflexes normal

## ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S PATIENT DATA BASE FORM (Cont.)

Allergies/Intolerances		Prescription Coverage			
Penicillin – hives	I	Insurance: BlueCross Blue Shield			
Lovastatin – abdominal pain		Copay: Visits - \$25, Formulary - \$	10, Nonformulary - \$20		
		Annual income: \$40,000			
Current Drug Therapy					
Drug Name/Dose/Strength/Route	Prescribed Schedule	Duration Start-Stop Dates	Compliance/Dosing Issue		
1. albuterol MDI (17 g)	2 puffs every 4-6 hrs pro shortness of breath	10/01/85-present			
2. beclomethasone inhalation 42 mcg	2 puffs BID	10/01/85-present			
3. conjugated estrogen 0.625 mg	1 tablet daily	5/23/91-present			
4. medroxyprogesterone acetate 2.5 mg	1 tablet daily	5/23/91-present			
5. fluoxetine 10 mg	1 capsule daily	6/2/92-present	Patient stopped medication from 1994-1999		
6. acetaminophen 500 mg	1-2 tablets TID	10/7/01-present			
7. fluticasone propionate HFA 44 mcg	2 puffs BID	6/4/02-present			
8. atorvastatin 10 mg	1 tablet daily	1/15/05-present			
9. fish oil capsules	2 grams BID	1/15/05-present			
10. multivitamin	1 tablet daily	01/01/00-present			
11. nicotine patch 7 mg	1 patch daily	08/12/06-9/14/06			
Medication History					

Patient is very compliant with medications and has minimal side effects, but had intolerance to lovastatin prior to switch to atorvastatin. Stopped taking fluoxetine from 1994-1999 because depressive symptoms improved. Restarted fluoxetine 20 mg daily in 1999 while going through divorce with husband and decreased to 10 mg in 2001 since doing well. Patient was given oxycodone/acetaminophen prn for pain while in the hospital after hip fracture. She has been taking acetaminophen only since discharge. Medications have controlled asthma well for over 2 years as evidenced by albuterol use less than twice per month and vasomotor symptoms have been absent for the past 8 years with hormone therapy.

## ASHP CLINICAL SKILLS COMPETITION PHARMACIST'S CARE PLAN

Clinical Significance	Healthcare Need	Pharmacotherapeutic Goals	Recommendations for Therapy	Monitoring Parameter(s)	Desired Endpoints	Monitoring Frequency
Most Clinically Significant Problem	Osteoporosis	<ul> <li>Prevent future fractures, falls, and further bone loss</li> <li>Prevent complications, mobidity/mortality from fracture</li> <li>Restore quality of life and independence</li> </ul>	<ul> <li>Add bisphosphonate at treatment dose (e.g., alendronate 70 mg once weekly, risedronate 35 mg once weekly, ibandronate 150 mg once monthly)</li> <li>Add calcium 1500 mg and vitamin D (at least 400 international units)</li> <li>Fall prevention in the home</li> <li>Weight-bearing exercise (if/when able after recovery from hip fracture)</li> </ul>	BMD Tolerance to medication (e.g., GI upset) Appropriate adherence to medication (e.g., remain upright after taking, no food/drink for 30-60 minutes, etc.)	Reduced risk of fracture     Stabilize rate of BMD decline	<ul> <li>BMD in ≥ 2 years</li> <li>Follow-up any medication issues in 1 month</li> </ul>
Major Clinical Significance	Depression	Improve symptoms     Restore quality of life and independence	<ul> <li>Increase dose of fluoxetine to 20 mg daily (preferred option)</li> <li>Alternative options include changing to another SSRI with shorter half-life due to age or adding another antidepressant (bupropion or tricyclic antidepressant)</li> <li>Counseling with psychologist or psychiatrist</li> </ul>	<ul> <li>HAM-D score</li> <li>Improvement of symptoms and activity involvement</li> <li>Adverse effects of medication</li> </ul>	<ul> <li>HAM-D score improvement (lower than current score=20)</li> <li>Improve symptoms of depression</li> <li>Return to previous level of functioning</li> <li>Prevent further episodes</li> </ul>	<ul> <li>HAM-D 6-8 weeks         after dose increase and         every 6-8 weeks         thereafter</li> <li>Medication effects and         symptom improvement         in ~4-6 weeks</li> </ul>
Major Clinical Significance	Acute pain associated with hip fracture	Improve symptoms	<ul> <li>NSAID therapy with food using prescription strength scheduled doses (especially effective for bone pain) – examples include ibuprofen, naproxen, diclofenac, etc.</li> <li>Opioid combination agents (e.g., hydrocodone/ibuprofen) may be considered if NSAID ineffective</li> </ul>	<ul> <li>Improvement of pain on 1-10 scale</li> <li>Blood pressure</li> <li>Drowsiness and CNS changes</li> <li>BUN/SCr</li> <li>Worsening asthma</li> </ul>	Level of pain acceptable to patient and/or improvement in 1-10 scale     Maintain normal blood pressure	<ul> <li>Pain scale and symptom improvement within 3-5 days</li> <li>BUN/SCr at next visit</li> <li>Medication side effects and/or adherence issues at next visit</li> </ul>

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Clinical Significance	Healthcare Need	Pharmacotherapeutic Goals	Recommendations for Therapy	Monitoring Parameter(s)	Desired Endpoints	Monitoring Frequency
Major Clinical Significance	Menopause (long- term hormone therapy risk>benefit)	Decrease risk of adverse event (heart attack, breast cancer, DVT/PE)	Slow taper of hormone therapy regimen (i.e., decrease dose of estrogen to 0.45 mg or 0.3 mg or number of days/week patient takes therapy)	Return of vasomotor symptoms (taper going too fast)	Reduce risk of cardiovascular events, incl. MI, stroke, DVT/PE; breast cancer     Free of vasomotor symptoms	Symptoms and consideration for further taper of hormone therapy in 2-4 weeks (complete taper may take months based on response)
Major Clinical Significance	Dyslipidemia	Attain LDL goal (<130 mg/dl)     Prevention of cardiovascular events	<ul> <li>Intensify LDL lowering by increasing atorvastatin to 20 mg daily (preferred option)</li> <li>Alternative option would be to add ezetimibe</li> <li>Advise appropriate diet therapy</li> </ul>	<ul> <li>Fasting lipid panel</li> <li>ALT (hepatic transaminase)</li> <li>Symptoms of myopathy (muscle aches, pains, weakness)</li> </ul>	Primary target LDL <130 mg/dl     Secondary target of non-HDL reduction not appropriate until LDL goal achieved	<ul> <li>Lipid panel in ~6         weeks and periodically         thereafter</li> <li>ALT (hepatic         trnsaminase) in 6         weeks and periodically         thereafter</li> <li>Creatine kinase only if         patient has symptoms         of myopathy</li> </ul>
Minor Clinical Significance	Asthma	<ul> <li>Provide appropriate therapy (current duplication of therapy)</li> <li>Maintain control of symptoms</li> <li>Ensure appropriate technique</li> </ul>	<ul> <li>Discontinue one of the steroid inhalers since pt has been well controlled for 2 years and is a duplication of therapy</li> <li>Continue other steroid inhaler twice daily</li> </ul>	<ul> <li>Daily and night symptoms of asthma</li> <li>Peak flow (optional if symptoms are monitored)</li> <li>MD visits or hospitalizations</li> <li>Albuterol MDI use</li> </ul>	<ul> <li>Minimal symptoms         (using albuterol ≤ 2         times/week)</li> <li>Peak flow 80-100%         of personal best</li> <li>No MD visits or         hospitalizations</li> </ul>	<ul> <li>Review symptoms and treatment in 1 month, then every 1-6 months thereafter</li> <li>Peak flow if symptoms worsen</li> </ul>
Minor Clinical Significance	Prior tobacco use/ continued smoking cessation	<ul> <li>Encourage tobacco-free status</li> <li>Prevent relapse</li> <li>Reduce risk of cardiovascular events and complications</li> <li>Reduce risk of lung cancer, COPD, and respiratory infections</li> </ul>	<ul> <li>Counseling or stop smoking program, if needed (i.e., ensure social support)</li> <li>Tips for withdrawal symptoms, if they occur</li> </ul>	Withdrawal symptoms	Prevent relapse     Decrease risk of cardiovascular events     Decrease risk of lung cancer, COPD, respiratory infections	Check-in with patient periodically (e.g., monthly) to assess tobacco status and presence of withdrawal symptoms

Clinical Significance	Healthcare Need	Pharmacotherapeutic Goals	Recommendations for Therapy	Monitoring Parameter(s)	Desired Endpoints	Monitoring Frequency
Minor Clinical Significance	Health Maintenance	<ul> <li>Prevent breast, cervical, and colon cancer</li> <li>Prevent pneumonia and influenza</li> <li>Avoid hospital admission and illness</li> </ul>	<ul> <li>Mammogram</li> <li>Pap smear (+/- since pt over 65 yrs)</li> <li>Colon cancer screening (by FOBT, sigmoidoscopy, colonoscopy, or double-contrast barium enema)</li> <li>Pneumococcal vaccine</li> <li>Flu shot now (if not already given this season) and again every fall</li> </ul>	<ul> <li>Clinical symptoms of respiratory illness (e.g., fever, chills, cough dyspnea)</li> <li>Adverse reaction from injection (e.g., pain, swelling)</li> </ul>	<ul> <li>Prevent         pneumococcal         pneumonia and         influenza virus         infection</li> <li>Prevent breast,         cervical, and colon         cancer</li> </ul>	<ul> <li>Mammogram every 1-2 years</li> <li>Colon cancer screening every 1, 5 or 10 years depending on screening test performed</li> <li>Pap smear (if performed) every 2-3 years</li> <li>Clinical symptoms of</li> </ul>
						respiratory infection at each visit  Evaluate for influenza vaccination yearly