Welcome and Introduction

Welcome to the third part of the Trilogy on Elder Underwriting where we get down to practical issues in day to
day insurance underwriting of older applicants.

Please review the cases in this pre-release of the cases for the workshop and come prepared for a dynamic
discussion on older age underwriting challenges. The workshops will include additional materials to
augment the case descriptions. All cases, salient discussion points and additional materials will be
available to workshop attendees.

There are 6 case examples in the following pages which demonstrate a number of the features and challenges of
older age underwriting. It is not our intent to cover all cases in every workshop unless time permits. We
plan to look at these cases from both the morbidity and mortality perspective.

Life rate discussions will be kept at a high level:

Average risk
High risk (250-500% mortality)
Marked risk (in excess of 500%)

We are looking forward to robust discussions

Regards:
Marjorie and Kevin
Case #1: 78yr female for $3 Million of UL

On the application:

- **Medical history**
  - High blood pressure & High cholesterol
  - Osteoarthritis – Knee
  - Urinary incontinence
  - Ceased smoking 5 yr ago

- **Current medications**:
  - Lipitor (atorvastatin)
  - Vasotec (enalapril)
  - Maxide (hydrochorthiazide/triamterene)
  - Celebrex (celecoxib)
  - Beclomvent (beclomethasone inhaler)
  - Vitamin D and Calcium supplements

- **Family history**:
  - Father died at 62 of thrombosis
  - Mother died at 62 of stroke
  - Brother died of aneurysm at 70
  - Husband died 2 years ago

- **Paramedical exam**:
  - “appears healthy”
  - BMI 20: HR 80bpm; BP 175/90

- **Supplemental screening for ages 70+**:
  - DWR of 5.
  - Timed Get-up-and-Go speed of 12sec.
  - Walks “with weights” daily.
  - Stopped driving 2yr ago
  - Moved States to live with her married daughter 2 yrs ago

- **Laboratory screen**:
  - Tests out of the normal range were:
    - SGOT(ALT) 60U/L (ref range to 41)
    - GGT 80U/L (ref range to 65)
    - Albumin 3.4g/dl (ref range 3.5+)
    - TC/HDL ratio 3.0

- **Resting EKG**: QS waves in V1-2

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Case #1: 78yr female - continued

**Primary Care Medical Record**:

- **Recent visits for**:
  - Osteoporosis
  - OA knees that limits walking
  - Urge Incontinence
  - Labile HTN controlled for 1yr
    - last BP on file was 130/80
  - Lipids controlled with statin

- **Past history**:
  - 2007 Chest pain when spouse died – cardiac consult diagnosed a “mild” MI
  - 2007: PFT FEV1: 74% of predicted; diagnosed with COPD at the time

No indication of follow-up respiratory or cardiac testing

**Discussion points**:

- What aspects of her medical history are of concern?
- Are there any favourable factors?
- Is she a better risk for long term care insurance than life insurance?
Case #2: 73yr female for $400 of UL

On the application:
- **Medical history within 10 years:**
  - Asthma
  - Dizziness / fainting
  - High blood pressure
  - Blood in her urine
  - Headaches
- **Current medications:**
  - Rosuvastatin
  - Valsartan
  - Diltiazem
  - Lorazepam
- **Family history:**
  - Father died at 52 of myocardial infarction
  - Mother died at 76 of stroke

Paramedical exam:
- BMI 21.2
- BP 122/63
- **Supplemental screening for ages 70+**:
  - DUR of 7
  - Timed Get-up-and-Go speed of 13sec.
  - Lives with spouse
  - Does volunteer work
  - No loss of IADL or ADL.
- **Laboratory screen**:
  - SGOT(ALT) 60U/L (ref range to 41)
  - GGT 80U/L (ref range to 65)
  - Albumin 3.4 g/dl (34 g/l)
  - Urine abnormalities
    - 18 RBC/hpf
    - Protein 6mg/dl
    - Protein/creatinine ratio 0.14 (norm to 0.2)
- **Resting EKG**: Normal

Case #2: 73yr female - continued

Urology Record:
- 1992 work-up for microscopic hematuria
  - Found a benign lesion on the R. kidney
  - Serial ultrasounds noted stability
- 2007 referral for 2-3+ blood on urinalysis
  - Cystoscopy, ultrasound and CT of the kidneys revealed:
    - Benign renal cysts without solid component
    - Numerous benign –appearing urethral polyps without obstruction. No need to biopsy.
- Follow up every 6-12 months until 8/08
  - Urinalysis with 0 – 3 x RBC
  - Cytology always negative
  - One episode of full cystitis
  - Last urology visit 8/2008

Primary Care record since 2009:
- **Recent visits**
  - UTI 4/12 classic cystitis
- **Past history**
  - 2005 fainted 2nd to dehydration
  - 2009 dizziness with migraine
  - 2010 UTI classic cystitis
- **Lab record**
  - Chemistry consistent with insurance lab
  - No routine urine evaluation

**Discussion Points:**
- Client is applying for $400K in additional coverage at preferred rates. UW is referring for MD opinion on insuring PI at preferred rates ($100K in force at preferred rates 5mo ago)
- What are the favorable and unfavorable features?
- What are your concerns about this applicant?
- How will you reply to the underwriter?
Case #3: 72yr female for $150K

### On the application:
- **Medical history**
  - Hypothyroidism since 1970
  - Hypertension since 2008
  - Hyperlipidemia since 2008

- **Current medications:**
  - levothyroxine 100mcg/day
  - hydrochlorothiazide 25mg/day
  - simvastatin 40mg/day

- **Family history:**
  - Father died at 91 of emphysema
  - Mother died at 91 of heart failure
  - Brother died of brain aneurysm
  - 2 siblings living at 52 and 78

- **Paramedical exam:**
  - BMI 26
  - BP 100/60

- **Supplemental screening for ages 70+:**
  - DWR of 8
  - Timed Get-up-and-Go speed of 11sec.
  - Walks 1 hour daily
  - Lives with spouse
  - Does volunteer work
  - No loss of IADL or ADL

- **Laboratory screen:**
  - Blood normal
  - Urine normal

- **Resting EKG:** Normal

### Discussion points:
- Describe favorable and unfavorable for this applicant
- What are the predictors / issues for future mortality and morbidity risk in this client?
- How will these issues impact her application for life insurance and long term care insurance?

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Case #3: 72yr female - continued

### Primary Care Physician record:
- 2012 most recent office visit
  - Low back pain of 2 days duration diagnosed as muscle strain

- Past medical history
  - Osteoporosis since 2006
    - T-Score 2008: L 1-4: -2.7 Hip: -1.2
    - T-Score 2011: L 1-4: -2.6 Hip: -2.4
    - Failed oral bisphosphonate due to esophageal side effects
    - Takes Vit D and calcium and exercises regularly

- Remote past
  - Cataract successfully treated surgically
  - Diverticulosis found on routine colonoscopy
  - GERD treated with Prilosec (omeprazole)

### Routine care includes regular recommended screening
Case 4a: 73yr male for $200K - business coverage

On the application:
- **Medical history**
  - Arrhythmia (PVCs past 10 yrs)
  - Wrist fracture 1 yr ago
  - Tripped on a curb during his customary twice weekly 2 mile jog/walk
  - Life long non-smoker
  - Shares a bottle of wine with wife at dinner daily
- **Current daily medications**
  - Atenolol 12.5mg
  - Lovastatin 20 mg
  - ASA 81mg
- **Family history**
  - Father died at 30yr of MVA
  - Mother died at 76 of lymphoma
  - 2 siblings living at 68, 69, and 72yr

- **Paramedical exam**
  - BMI 27; BP 120/74;
  - Chest 43in (109 cm) & Waist 36in (91 cm)
- **Supplemental screening for ages 70+**
  - DWR 7,
  - Get-up-and-go 7sec, all else normal
  - Applicant appears healthy, friendly, outgoing and living with his wife
  - Working fulltime as president of a tool company
- **Laboratory blood screen**
  - TC 294 mg/dl (7.7 mmol/l), TC/HDL ratio 6
  - Albumin 4.1 g/dl
  - GGT 85 (ULN 65 U/L)
  - ALT 45 (ULN 45 U/L)
  - Creatinine 1.3 mg/dl (114 µmol/l)
  - PSA 6.5 ng/ml
  - Urine normal
- **Resting EKG**: Normal

Discussion points:
- What features are worrisome/favourable?
- Is the PSA result of concern?
- What is your action:
  1. Make an offer?
  2. Postpone?
  3. Kick yourself for doing a PSA?
**Case 4b: 73yr male for $200K - business coverage**

### On the application:
- **Medical history**
  - Prostate cancer (2002)
  - Heart murmur (MVP x 40yr)
  - Arrhythmia (PVCs past 10 yrs)
  - Wrist fracture 1 yr ago
    - Tripped on a curb during his customary twice weekly 2 mile jog/walk
- **Current daily medications**:
  - Atenolol 12.5mg
  - Lovastatin 20 mg
  - Loratadine 5mg
  - ASA 81mg
- **Family history**:
  - Father died at 30yr of MVA
  - Mother died at 76 of lymphoma
  - 2 siblings living at 68, 69, and 72yr

### Paramedical exam:
- BMI 27;  BP 120/74;
- Chest 43in (109 cm) & Waist 36in (91 cm)
- **Supplemental screening for ages 70+:**
  - DWR 7
  - Get-up-and-go 37sec, all else normal
- **Laboratory blood screen:**
  - TC 294 mg/dl (7.7 mmol/l), TC/HDL ratio 6
  - Albumin 4.1 g/dl
  - Creatinine 1.3 mg/dl (114 µmol/l)
  - PSA 6.5 ng/ml
- **Urine normal**
- **Resting EKG:** CRBBB

### Medical records revealed:
- **Urology:**
  - PSA Rb for PSA of 6.5 ng/ml free PSA 12% 2002 radical prostatectomy pathology report:
    - Adenocarcinoma, Gleason 3+4=7, estimated carcinoma volume 50%
    - Focal extracapsular extension with perineural extension and focal involvement of the left apical resection margin
    - Seminal vesicles and lymph nodes – no pathology
  - Serial annual follow ups to 2010
    - PSA <1.1 ng/ml to 2010
    - 2007 CT scan of abdomen and pelvis:
      - Normal apart from trabeculation of the urinary bladder without obstruction, hydronephrosis or masses
  - 2007 office visit
    - COPD by chest X-ray 2002 to 2005;
    - LVH on echo 2005

### Primary Care:
- 2/2007 office visit (continued)
  - Complain of abdominal pain and clay colored stool
  - Abdominal CT incidental findings of:
    - Liver hemangioma (2.5 x 0.9cm)
    - Multiple subcentimeter renal, hyperattenuated cortical lesions in both kidneys consistent with cysts
  - 10/2007 acute low back pain and numbness radiating into L Leg – difficulty walking, urinating
    - Stat neurology consultation
    - MRI (lumbar spine): disc disease and arthritic disease; foraminal encroachment above L4-5
    - MRI (brain): no focal lesions or evidence of stroke; incidental finding small vessel disease
  - 2008 office visit for palpitations
    - Resting EKG - RBBB
    - Resting echocardiogram:
      - LA 3.8 cm; LVEDD 4.6 cm; IVSd 1.29cm; PWd 0.88cm; aortic root 3.47cm; RVSP of 11mmHg
      - Valves: normal leaflets, mild MR, mild PR, mild TR

### Discussion points:
- Describe the predictors or mortality and morbidity risk in this applicant
- What are your concerns about this applicant?
- Can you make an offer?
Case 5: 79yr male for $400K - replacement

On the application:

- **Medical History:**
  - Asthma onset 1980
  - High blood pressure onset 1980 controlled
  - Myocardial infarction with CABG – 1999
  - Depression since 1999 maintenance Rx

- **Current daily medications:**
  - Theophylline 300mg bid
  - Asmanex (mometasone) 1 puff
  - Albuterol inhaler prn
  - Lexapro (escitalopram) 10mg
  - Lisinopril 10mg
  - Metoprolol 50mg

- **Family history:**
  - Father died of stroke at 72;
  - Mother of cancer at 55;
  - Sibs died of: natural causes at 98; stroke at 78; diverticulitis at 69; unknown cause at 59

- **Paramed:**
  - BMI of 23.6; BP 109/63

- **Senior supplement:**
  - DWR of 5; Get-Up-and-Go 16sec;
  - Retired attorney living with spouse and actively involved in the community

- **Lab:**
  - Blood Screen:
    - TC 127; TC/HDL ratio 3.0;
    - Albumin 3.9g/dl (39gm/l);
    - Creatinine 1.3mg/dl (115mmol/l);
    - A1C 5.6%
  - Urine Screen: Normal

- **EKG:** normal

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Case 5: 79yr male for $400K - continued

**Medical Record**

**Pulmonary:**
- Mild to moderate persistent asthma:
  - 2011 PFT (normal spirometry, diffusion decreased):
    - FVE 3.59 L (89%); FVE1 2.58L (100%); FEV1/FVC 72%; FEF25-75 1.5L/sec (67%)
    - DL (adjusted) 12.64/ml/sec/mmHg 70%

**Cardiovascular history:**
- 1999 Non Q wave infarction; 4 vessel CABG
  - LA 65% mid corrected with LIMA, RCA 95% distal and LCA 70% mid with saphenous vein
- 2008 resting echocardiogram: LVH follow up
  - LA 5.1cm; LVID 3.0cm; IVSd 1.0cm; PWd 1.3cm; EF 66%; E to A 0.59; valves normal
- 2009 last stress thallium:
  - Asymptomatic to 7METS;
  - ST depression of 1.5mm at peak with
  - Negative perfusion
- 2011 carotid doppler for soft bruit
  - Mild obstruction 0-20% bilaterally, velocities OK

**Other medical history:**
- 1999 depression since MI, maintenance Rx
- 2001 impaired fasting glucose – stable; no progression
- 2001 MRI for transient bilateral diplopia
  - Numerous abnormal foci in the deep sub-cortical white matter consistent with chronic small vessel ischemic change. No evidence of acute ischemia
  - Cardiac atrophy
  - No evidence of orbital or supra-sellar mass
- Incidental note in 2011 CPE – wears Depends for incontinence

**Discussion points:**
- What features are worrisome, favorable?
- How will these features impact his life insurance application?
- Can you make an offer?