What’s Ahead:  
Palliative and End of Life Care in the Age of Global Payment

Timothy E. Quill M.D.  
Palliative Care Program  
University of Rochester Medical Center

Disclosure of Financial Relationships

I have no significant financial conflicts of interest.
Objectives

1. Understand some challenges posed by medical and public health successes

2. Review the distinctions and similarities between palliative care and hospice

3. Present key recent studies showing palliative care’s potential impact on quality, cost, and length of life

4. Explore the potential challenges for fully integrating palliative care into mainstream medicine

Three Cases of Advanced Heart Failure: To VAD or not to VAD...?

- **Case 1**
  - 75 y/o m admitted for the third time in three months with CHF
    - Receiving state of the science heart failure treatment
    - Treatment included intravenous milranone
    - Ejection fraction 15%
    - Not a transplant candidate

- Heart failure team recommended a Ventricular Assist Device (VAD)
  - Evidence of improved quality and length of life
  - Patient was reluctant
  - Wife and family ardently wanted him to proceed
Case 1 Continued

• Palliative care consult requested
  – Tricky terrain for palliative care – avoiding the self-fulfilling prophesy
  – Open mind to what VAD’s can and cannot do

• Patient really did not want the VAD
  – Take his chances on medical management
  – Hoped to live but not afraid to die
  – Recommending doctors and family had a hard time accepting

• Home with hospice
  – Continued medical management of his CHF (palliating dyspnea)
  – Died at home several months later

Case 2

• 65 year old with a successful VAD for 2 years
  – Excellent quality of life
  – Found to have widely metastatic melanoma
  – Oncologic treatment for his melanoma was not recommended

• Palliative care consultation
  – Symptoms were well managed
  – Goal was to continue living but no major medical adventure
  – DNI/DNR but still hospitalize for relatively easily reversible conditions

• Considered hospice referral
  – Could palliate melanoma but treat heart failure
  – But still potentially wanted hospitalization short of intubation
  – Home palliative care
Case 2 continued

• Continued to live relatively well for 9 months
  – No hospitalizations, no significant pain, good family times
  – Gradually progressive weakness
  – Wife gradually began to wear down with the added burdens of care

• Ended up in the hospital with extreme fluid overload
  – Neither oncology floor or heart failure floor was comfortable with him
  – He still wanted non-invasive measures to try to reverse problems
  – Began to go into renal failure; lost capacity

• Eventually reached a point where there was agreement to stop
  – Patient was oriented to fight, but lost capacity
  – VAD team had little experience with shutting off VAD and palliating
  – Lived for about 6 hours after VAD shut off

Case 3

• 81 year old man with advanced heart failure
  – Multiple admissions over the past 3 months
  – Ejection fraction of 15%; high risk of dying
  – Otherwise relatively functional
  – Primary care taker for his 80 year old wife at home with dementia
  – Wife would clearly be institutionalized without him at home

• Medical options
  – Clearly not a heart transplant candidate
  – Continued medical management with or without hospice
  – Possible candidate for a VAD
Case 3 continued

• Tolerated VAD surgery very well
  – Able to go home and care for his wife
  – Much more functional than I would have imagined
  – Able to care for his wife at home until she died 3 years later

• But not at all a simple course
  – Drive line infection requiring continuous antibiotics
  – Again managed well on home antibiotics
  – “Poster” for our palliative care program
  – Eventually developed bladder cancer and even tried surgery
  – Died 8 years after VAD insertion of treatment withdrawal

Background Data in the US

• 70-80% of deaths in hospital or nursing home
• Families frequently impoverished
• 30% completion of advance directives
• Inadequate pain management at all levels
• Physicians overly optimistically prognosticate
• Infrequent, very late referrals to hospice
• Medical rituals replacing religious rituals
• Economic incentives promote over-treatment
Complex and Changing Medical Environment

- Many medical choices as patients get sicker
  - Expensive treatments of more and more marginal gain
  - No clear endpoint
  - Deep burden of choice
- Many perverse incentives (radically different and in flux in the US)
  - Invasive procedures and devices well compensated
  - Little reinforcement of conversations about what is really happening
  - Any death as an adverse quality outcome according to HCAPS
- No one is really in charge; few deep relationships with patients
  - Primary care physicians absent in most hospitals
  - Specialization and segmentation cloud the “big picture”
  - Palliative care in a very tricky position

Healing Approaches to Serious Illness

- Limits of usual conceptualization
  - Curative or restorative disease-based model
  - Unclear how adaptation to chronic illness fits
  - Death as a medical failure
- Broader model of healing
  - Maintaining integration and wholeness
  - Finding meaning and maintaining connection
  - Opportunity for growth and closure
  - Commitment to face the unknown together
Definition of Terms

• **Palliative Care**: biological, psychological, social, and spiritual care of patients with serious illness

• **Goal of Palliative Care**: to produce the best possible quality of life for the patient and family, to assist with medical decision-making, and to provide extra support

• **Hospice**: Medicare sponsored program dedicated to provide palliative care for terminally ill patients and their families

Elements of U.S. Medicare Hospice Benefit

• “Cadillac” of home care programs

• Payment for all medications and medical services

• Expert team of experienced caregivers

• Supplementation of care at home or nursing home

• Possibility of respite care and emergency inpatient care
Elements of Medicare Hospice Benefit

- Capitated, per-diem reimbursement
- Prognosis of 6 months or less
- Waive rights to curative treatment
- Primary care giver – not 24 hour care

Limitations of Medicare Hospice Benefit

- Inherent prognostic uncertainty
- Late referrals (*wait until I really need it*)
- Unavailable to those who want to continue some active Rx
- Primary care giver requirement
- Cultural, ethnic, socioeconomic barriers
Some Data from Hospice in the US

- Serves about 35% of patients who die in the US
- Has broadened admission criteria to serve a wide range of patients including those in nursing facilities
- Length of stay tends to be short for those referred
  - Median length of stay is less than 3 weeks
  - Mean length of stay is about 2 months
  - About 1/3 are on the program for less than a week
- Satisfaction levels are generally very high once on the program
- Much variation between sites and regions of the country

Some Challenges of the Hospice Discussion

- Hospice requires a “bad news” discussion
  - Acceptance that medical treatment isn’t working
  - Acceptance of likelihood of death in 6 months
  - Giving up on hospitalization and disease-driven treatment
- Many patients don’t want to stop all treatment
  - May be willing to stop burdensome treatment
  - May want to continue to maintain more options
- Small chances of cure or longer life maintain hope
Palliative Care is Not End of Life Care

• Many patients seen are cured or have a normal life span

• Making informed decisions about disease-directed treatments

• Exploring the full range of treatment options
  – Aggressive treatments including dialysis, VADs, etc
  – Palliative treatments along side disease directed treatments
  – Resuscitation preferences

• Symptom reduction, physical / emotional functioning, spiritual well-being
Potential Benefits of Palliative Care

- Improved pain and symptom management
- Careful attention to quality of life
- Fresh look at medical goals and priorities
- Assistance with difficult decision-making
- Multidisciplinary approach
- Focus on patient and family
Unlike hospice, palliative care allows for:

- Simultaneous treatment of underlying disease
- Acute hospitalization if needed
- Palliation alongside the most aggressive disease treatment
- Much more prognostic uncertainty

Palliative Care:
When should it be discussed?

- Patients with difficult to treat symptoms
- Patients who fear future suffering
- Patients who face uncertain medical choices
- Patients and families who need added support
- All patients with a serious, potentially life-threatening illness
Palliative Care: Hoping and Preparing

• “Let’s hope for the best…”
  – Join in the search for medical options
  – Open exploration of improbable/experimental Rx
  – Ensure fully informed consent

• “...attend to the present…”
  – Make sure pain and physical symptoms are fully managed
  – Attend to depression and any current psychosocial issues
  – Maximize current quality of life

• “...and prepare for the worst.”
  – Make sure affairs (financial/personal) are settled
  – Think about unfinished business
  – Open spiritual and existential issues

Age Distribution of US population

[Graph showing age distribution of US population, with a peak around age 65 and a significant portion of the population over 65.]

http://www.metlife.com
Figure 1

SOCIAL SECURITY, MEDICARE, AND MEDICAID AS A PERCENTAGE OF GDP

Source: Congressional Budget Office.
Figure 2. Growth in Medicare Expenditures, 1970-2015

Dollars in Millions

Note: Figures for 2010 and 2011 are projected.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manhattan, NY</td>
<td>$10,331</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>$10,050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Island, NY</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dallas, TX</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houston, TX</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fort Lauderdale, FL</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia, PA</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baltimore, MD</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston, MA</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleveland, OH</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Louis, MO</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columbus, OH</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cincinnati, OH</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington, DC</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birmingham, AL</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix, AZ</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charlotte, NC</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milwaukee, WI</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indianapolis, IN</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albany, NY</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seattle, WA</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minneapolis, MN</td>
<td>$10,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Data are from the Dartmouth Atlas Project.
Feeding tube insertions and health care transitions

FIG. 1. (A) One-year incidence of feeding tube insertions by hospital referral region. (B) States of health care transitions for U.S. veterans with a nursing home stay in 2010 by hospital referral region.
Where more can be less

EXHIBIT 1
Relationship Between Quality and Medicare Spending, as Expressed by Overall Quality Ranking, 2000–2001

<table>
<thead>
<tr>
<th>Overall quality ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>21</td>
</tr>
<tr>
<td>31</td>
</tr>
<tr>
<td>41</td>
</tr>
<tr>
<td>51</td>
</tr>
</tbody>
</table>

Annual Medicare spending per beneficiary (dollars)


For quality ranking, smaller values equal higher quality.

EFFICIENCY

International Comparison of Spending on Health, 1980–2009

Average spending on health per capita (US PPP*)

United States
Canada
France
Australia
United Kingdom

Total expenditures on health as percent of GDP*

United States
Canada
France
Germany
United Kingdom
Australia

*PPP—Purchasing Power Parity
Source: Commonwealth Fund National Scorecard on U.S. Health System Performance, 2011.
Early Palliative Care for Patients with Metastatic Non-Small-Cell Lung Cancer. NEJM. 2010;363:733-42

- RCT of 151 patients with newly diagnoses metastatic non-small cell cancer
  - Standard oncologic care (SOC) alone
  - SOC plus early and ongoing palliative care PC (consult and monthly visits)

- Measures
  - Health related quality of life (FACT-L)
  - Mood (HADS and PHQ-9)

- Results – patients who received SOC plus PC had significantly
  - Better quality of life (FACT-L 98.0 vs 91.5; p=0.03)
  - Less depression (16% vs 38%; p=0.01)
  - Less aggressive medical care at end of life (33% vs 54%; p=0.05)
  - Longer median survival (11.6 vs 8.9 months; p=0.02)

Morrison et al. Palliative Care Consultation Teams Cut Hospital Costs For Medicaid Beneficiaries. Health Affairs 2011;30:454-453

<table>
<thead>
<tr>
<th></th>
<th>Live Discharges</th>
<th>Hospital Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Per Admission</td>
<td>$36,741</td>
<td>$32,643</td>
</tr>
<tr>
<td>Per Day</td>
<td>$2,744</td>
<td>$2,254</td>
</tr>
<tr>
<td>ICU</td>
<td>$6,452</td>
<td>$3,774</td>
</tr>
<tr>
<td>Days in ICU</td>
<td>5.8</td>
<td>5.3</td>
</tr>
<tr>
<td>% Died in ICU</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>D/C to hospice</td>
<td>1%</td>
<td>30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Usual Care</th>
<th>Palliative Care</th>
<th>Δ</th>
<th>Usual Care</th>
<th>Palliative Care</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Admission</td>
<td>$36,741</td>
<td>$32,643</td>
<td>-$4,098*</td>
<td>$36,741</td>
<td>$32,643</td>
<td>-$4,098*</td>
</tr>
<tr>
<td>Per Day</td>
<td>$2,744</td>
<td>$2,254</td>
<td>-$490†</td>
<td>$2,744</td>
<td>$2,254</td>
<td>-$490†</td>
</tr>
<tr>
<td>ICU</td>
<td>$6,452</td>
<td>$3,774</td>
<td>-$2,678‡</td>
<td>$6,452</td>
<td>$3,774</td>
<td>-$2,678‡</td>
</tr>
<tr>
<td>Days in ICU</td>
<td>5.8</td>
<td>5.3</td>
<td>-.5</td>
<td>5.8</td>
<td>5.3</td>
<td>-.5</td>
</tr>
<tr>
<td>% Died in ICU</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>58%</td>
<td>34%</td>
<td>-24%‡</td>
</tr>
<tr>
<td>D/C to hospice</td>
<td>1%</td>
<td>30%</td>
<td>29%‡</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* p<.05; + p<.01; ++ p<.001; N/A Not Applicable
Perspectives on

What Palliative Care is for...

- Patients and their families
- Referring physicians
- Hospital administrators
- Payers
Palliative Care
Patient Perspective

– relieve symptoms
– navigate a complex / confusing medical system
– understand the plan of care
– coordinate and control care options
– palliation of suffering along with continued treatment
– practical and emotional support for exhausted caregivers

Palliative Care
Clinician Perspective

• *Save time* by helping with intensive patient-family meetings, coordination of care, discharge planning

• *Bedside management* of pain and distress of highly symptomatic and complex cases, 24/7

• *Promote patient and family satisfaction* with the clinician’s quality of care
Palliative Care
Hospital Perspective

- Effectively treat people with complex advanced illness
- Provide service excellence, patient-centered care
- Increase patient and family satisfaction
- Improve staff satisfaction and retention
- Meet JC quality standards
- Rational use of hospital resources, avoid costs
- Increase bed/ICU capacity, reduce costs

Palliative Care
Payer Perspective

- Improving quality and controlling cost
- Time based billing
- Quality improvement is an unequivocally good objective
- Cost control in this domain is a tricky issue
- Many large payers are now embracing and investing
- Specters of rationing and death panels
Proactive Palliative Care in ICU

- Baseline length of stay data on high risk ICU population
  - Metastatic cancer
  - Multi-organ failure
  - Advanced dementia
- 3 month data collection with no intervention
- Proactive palliative care consultation
  - Screening consultation on all patients who met criteria
  - Full consultation if desired by ICU team
- Main results
  - Decreased ICU time by one week on average per patient
  - Same number of deaths; same time to death

Proactive Palliative Care in ICU, continued...

- Everybody was happy with the intervention
  - Patients and families went to a more family friendly environment
  - ICU doctors and nurses got help with decision making when needed
  - ICU beds were “back filled” with more “appropriate” patients
  - Quality of care for those who died was improved by all markers
- Systems issues at play
  - Backfill of ICU patients good for hospital’s bottom line
  - Palliative care team got financial support for an additional NP FTE
  - Palliative care and ICU team collaborated on a paper
  - Norton et al. Critical Care Medicine, 2007;35:1-6
Specialty vs General Palliative Care

• General Palliative Care
  – Provided by non-palliative specialist or primary care clinician
  – May be alongside any and all other desired treatments
  – Part of good medical care delivered by existing providers

• Specialty Palliative Care
  – Provided by a clinician with specialty training in palliative care
  – May also be alongside any and all other desired treatments
  – May require more specialized knowledge and training
  – Potentially be restricted to more difficult cases
  – May be consultative or primary management

Specialty vs General Palliative Care: Some clinical examples...

• General Palliative Care
  – Basic pain and symptom management
  – Goals of care discussions
  – Family meetings for decision making
  – Decisions about stopping treatment or resuscitation

• Specialty Palliative Care
  – Complex pain and symptom management
  – Major family conflict over plan of care
  – Near futility discussions
  – Accessing “last resort” options for refractory distress
Isn’t palliative care just good medicine?

• Most clinicians have not been formally trained in the basics
  – Not a regular part of medical school and residency training
  – Practicing clinicians are largely self taught
  – May not know what they don’t know
  – Knowledge and skill base uneven at best

• Most non-specialists do not see the most challenging cases
  – Refractory symptoms unresponsive to basic treatments
  – Invasive symptom management measures
  – Severe depression and hopelessness
  – Wish to die

Specialty Palliative Care Consultation: Potential Benefits and Burdens

• Benefits
  – Added ideas and expertise around challenging issues
  – Clinicians don’t know their own “blind spots”
  – Help with counter-transference issues
  – Reassurance that all possibilities have been considered

• Burdens
  – Yet another team of medical providers involved
  – Potential to further “de-skill” primary care and specialist clinicians
  – Undermine a strong clinician-patient-family relationship
Some Challenging Situations Where Formal Palliative Care Consultation should be Considered

- Difficult to control physical symptoms
- Severe depression, anxiety or existential distress
- Conflict around goals of treatment
- Giving up on effective treatment seemingly “too soon”
- Request for continued ineffective, aggressive treatment
- Requests for assistance in dying

“He is not yet ready for palliative care.”

- Confusion between hospice and palliative care
- Equation of palliative care and “giving up”
- Reserving palliative care for the actively dying
- Under-valuation of enhancing quality of life for all patients
A self-fulfilling prophesy

- If palliative care consultation is withheld until
  - No further disease directed therapies are available
  - There are not meaningful alternatives other than hospice
  - The patient’s suffering is severe and overwhelming
  - The patient is actively dying

- Then palliative care would be a marker of
  - Giving up on active treatment
  - A symptom of medical failure
  - Time to transition to hospice
  - Death being nearby

Historical Tension between PC and Geriatrics

- Much common ground
  - Improving quality of life
  - Improving function

- “Old people are not just dying”
  - Equation of palliative care with end of life care
  - Paradox within palliative care
History of Present Illness

- Very healthy and active 64 year old woman
- PMH only of thyroid disease
  - partial thyroidectomy
  - on thyroid hormone replacement

- HPI
  - Two months before presentation developed back pain radiating to her right chest
  - No cough, hemoptysis, weight loss or other symptoms

Findings

- Mass in her right lower chest with mediastinal lymph node involvement

- Several areas of thoracic and lumbar spine involvement
  - Including spinal cord impingement of thoracic spine

- Incidental fining of a benign brain lesion (meningioma)

- Skinny needle biopsy ordered of the lung lesion
  - Adenocarcinoma of lung
    - Epidermal Growth Factor Receptor (EGFR) positive
    - Stage IV (locally invasive and multiple spine metastases)
Initial Treatment

- Radiation to the spine
  - Potential of spinal cord compression
- Chemotherapy options
  - Aggressive treatment with standard chemotherapy
  - Targeted therapy directed at EGFR mutation
- Chemotherapy chosen
  - Treatment with EGFR receptor blocker Crizotinib initiated
  - Main side effects are cardiac arrhythmias, nausea, diarrhea, visual disturbance and light sensitivity
- Palliative care consultation requested

Issues initially addressed by palliative care at initial consult

- Significant 7/10 back pain
  - Low dose long acting morphine started with prn backup
- Long standing anxiety which was much worse in this setting
  - Benzodiazepine started for acute relief
  - Appointment with her former therapist recommended
- Wanted to set limits on aggressive treatment
  - Living will and healthcare proxy documents updated
  - MOLST form completed designating DNR/DNI
- Very uncertain whether she could or would tolerate treatment
  - Monthly follow-up visits initially scheduled
**Additional palliative care issues addressed over the next two years**

- Much fear about future suffering
  - Referred to an experienced counselor for in depth work

- Failure of first line therapy and fear about second line
  - Helped frame new therapy as “time-limited trial”
  - Reinforced that she was in charge of continuing or stopping

- Husband became more withdrawn
  - Referral to his own counselor

- Awareness of personal growth and increased focus on the most important parts of her life as a result of the disease

**Current status**

- Excellent quality of life for 2 ½ years

- Now disease progressing
  - Increase is size of all lesions
  - Neurological deficit from her “meningioma”

- Now facing increasingly complex decisions
  - Resection of her CNS lesion
  - Trial of experimental chemotherapy

- Made transition to hospice
  - Died at home 3 weeks later
Final Thoughts:

• Does every seriously ill patient need palliative care? Yes!
  • Seriously ill patients are often symptomatic and in need of support
    – Faced with a daunting array of medical choices, especially as they get sicker

• Do all seriously ill patients need formal palliative care consult?
  – Probably not if their specialist or primary care doctor takes on that role
  – Unfortunately most have not been trained in these basic skills

• Which seriously ill patients need formal palliative care consult?
  – Difficult to treat symptoms
  – Struggling with very difficult medical decisions
  – Need added support
  – Contemplating any last resort options (assisted dying, stopping life support)
  – Without someone helping them address these issues

Bottom Line Summary

• Palliative care improves quality of care
  – Pain and symptom management
  – More informed decision making
  – Added patient and family support

• Palliative care probably improves cost of care
  – Better informed consent; more realistic expectations
  – Less expensive, near futile treatment
  – More timely and appropriate transition to hospice care

• Palliative care may improve actual mortality and/or mortality rates
  – If introduced early along side disease-directed therapy
  – By preventing near futile aggressive treatment that might shorten life
  – By facilitating earlier and more appropriate referral to hospice
Some Selected References


- Harrington SE, Smith TJ. The role of chemotherapy at the end of life: "when is enough, enough?". JAMA 2008;299:2667-78.

- Morrison RS et al. Palliative Care Consultation Teams Cut Medical Costs for Medicaid Beneficiaries. Health Affairs 2011;30:454-453


- Norton S et al. Proactive Palliative Care in the Medical ICU. Critical Care Medicine. 2007;35:1-6

Questions and Comments