How to Write an Abstract & Make a Great Poster

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Overview

- Abstract
- Types of Posters
  - Research Poster
  - Case Presentation Poster
  - Quality Improvement Poster
  - Patient Safety Poster
- Construction
- Examples
- Presentation
- Judging/Evaluation
Purpose of a Poster

- Communicate research
- To illustrate key points in a visually stimulating manner
- To represent yourself and your work to peers and colleagues
- To network with leaders in your field of interest
Abstract

• An Abstract is a brief summary of a research article, thesis, case….quickly allowing the reader to ascertain the purpose.

• An abstract is used as the basis for selecting research proposed for presentation.
Abstract Continued...

• Abstract will form the body of your poster

• Take already concise description of your work (abstract) and transition it into an exciting, interesting, accurate work of art (poster)

• After you have selected your case or completed your research/project, review examples
  • Program research department
  • ACP website – link to “winning” abstracts
  • Friends/colleagues
Developing an Abstract

• Purpose:
  – Application for poster presentations
  – Making selections for oral presentations
  – Briefly summarize work, allowing reader to quickly ascertain purpose

• Challenges:
  – Months/years of work into ~300-400 words
  – Deciding if work is worth entering
Research Abstract

• Title and Author Information
• Introduction
• Methods
• Results
• Conclusion
• 250 words (do not need to include Title and Author information in this block)
• “Writing a Research Abstract” on the ACP website under “Residents and Fellows”
• http://www.acponline.org/residents_fellows/competitions/abstract/prepare/
Looking at Examples as we go...
Resolution of Co morbidities and Diabetes Mellitus Type II in Native Americans Following Bariatric Surgery

Hamed Abbaszadegan, MD; Melissa Celaya Cortes, MA; Robin Blackstone, MD

Background

Recent evidence suggests that Type II Diabetes (T2D) is becoming a major health concern in Native American communities. This presents a significant challenge in terms of healthcare and medical interventions. Bariatric surgery has been shown to improve outcomes in patients with T2D and obesity, potentially reducing the burden of diabetes-related complications. Studies have demonstrated that bariatric procedures can lead to sustained weight loss, improved glycemic control, and reduction in diabetes-related comorbidities.

Methods

A retrospective analysis of prospectively collected data from November 2001 to November 2006 was performed on Native American patients undergoing bariatric procedures (gastric bypass and laparoscopic adjustable gastric band surgery). The study cohort included patients who completed at least 1 year of follow-up. The primary outcomes were changes in body mass index (BMI), fasting glucose, and hemoglobin A1c (HbA1c). Pre-operative and post-operative comorbidities were also assessed and compared.

Results

Among the 29 participants, 26 patients were female, and the mean age at surgery was 31.4 years. The initial comorbidities included obesity, hypertension, and dyslipidemia. The majority of patients (N=20, 69%) had comorbidities pre-operatively, and 12 of these were resolved post-operatively. The table below summarizes the pre-operative and post-operative resolution of comorbidities:

<table>
<thead>
<tr>
<th>Pre-Operative Comorbidities</th>
<th>Patients with Comorbidities</th>
<th>Percent Resolution of Comorbidities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Mellitus Type II</td>
<td>11</td>
<td>45.5%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>15</td>
<td>33.3%</td>
</tr>
<tr>
<td>Obstructive Sleep Apnea</td>
<td>15</td>
<td>26.7%</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>14</td>
<td>42.9%</td>
</tr>
<tr>
<td>Musculoskeletal Joint Disease</td>
<td>29</td>
<td>46.4%</td>
</tr>
</tbody>
</table>

Conclusions

The prevalence and severity of obesity and diabetes in Native Americans is among the highest in a population group in the world. Post-operative data from this study, in combination with non-Native American data, suggests that bariatric surgery can effectively improve diabetes-related health outcomes. Further research is needed to evaluate the long-term effects and sustainability of these improvements.

References

Pros & Cons of Prior Poster

- Background
- Text
- Color scheme
- Abstract
Clinical Vignette Abstract

- Title and Author Information
- Introduction
- Case Description
- Discussion
- 300 words

- A case worth reporting?
  - Classic example of unusual process
  - Unusual presentation common condition
  - New diagnostic strategy
  - Cost effective approach
  - Interest of others is mainly determined by your interest
Cryptogenic Stroke in the Presence of an Atrial Myxoma
Hamed Abbaspodarzeghan, MD; Jeremy Payne, MD, PhD
Cincinnati Children's Hospital Medical Center Department of Pediatrics, Cincinnati, OH

Introduction:
Strokes are often thought of as an occurrence in patients with risk factors such as long-standing hypertension, hypercholesterolemia, diabetes mellitus, obesity, smoking, and genetic factors to name a few. It is not as common to see strokes in the younger age population (less than 40 years old), especially in the absence of cardiac brain anomalies, right to left shunting, trauma, or endocarditis. When stroke occurs in this age group, the work up is often exhaustive to exclude clotting disorders, autoimmune conditions, and structural defects.

Case Report:
The patient is a 32-year-old African American male with no known FHx who presented to the hospital with sudden onset of mild headache, left-sided weakness, and left hemiparesis. During the patient's admission, it was determined that he had an acute right frontal lobe ischemic infarct. Extensive workup did not find a definitive cause, but a right atrial myxoma was incidentally found. There was no clearly visualized patent foramen ovale, however a bubble study suggested a small degree of right to left shunting. No vascular anomaly on MRA imaging was found. Extensive and workup which included coagulation studies, comprehensive drug screening, cultures, autoimmune etiologies, and fluid studies was unremarkable. The patient was discharged to acute rehab with a potentially cryptogenic stroke. Follow up to include a repeat transesophageal echo to confirm the myxoma is still present which would then require surgical evaluation for excision.

Discussion:
Often co-morbid disease, drug use, smoking, and other high risk activities can predispose patients to thrombotic events. This was not the case in our patient. Etiologies to rule out before tagging a patient with a "cryptogenic" title should include: structural anomalies of the heart (CT + MR imaging), lipid profile, coagulation studies (factor V leiden mutation, antithrombin III, lupus anticoagulant, cardio-lipid, prothrombin gene mutations, homocysteine), infectious etiologies, and autoimmune etiologies (Anti-nuclear antibody, rheumatic factor). An embolic particle no larger than 1 mm is sufficient to cause a clinically significant stroke. Despite no definitive R= Rchunt, it is impossible to imagine a small piece of the myxoma dislodging from an unseen shunt.

Annual Stroke rate for ages 15-49 = 10.8/100,000

References:
Pros & Cons of Prior Poster

- Color scheme
- Photos
- Little Text
- Visual Impact
Patient Safety & Quality Improvement Abstract

- Title and Author Information
- Introduction of topic
- Methods
- Results
- Conclusion
- 300 words (again, do not need to include Title and Author in this count)

- Category focusing on improving patient safety, quality & evaluating patient satisfaction.
Creating an Inpatient Clinic, the Future of Inpatient Medicine
Hamed Abbassadegan, MD, Ruth Franks, MD, Jordan Coulston, MD, Cheryl O’Malley, Banner Good Samaritan/Phoenix VA Health Care, Internal Medicine Residency Program

INTRODUCTION

With the advent of electronic medical records, bedside rounds have decreased in frequency on teaching services. Recent data suggests that multiple daily bedside rounds take similar or less time, and lead to improved patient satisfaction when compared to other forms of rounding. Furthermore, the application of computerized rounding and Lean Six Sigma principles may increase value-added (e.g., physician face time) and decrease resident work hour violations. Based on techniques developed at Virginia Mason Medical Center (Seattle, WA), we conducted Flow Rounds and operated an Inpatient Clinic in an attempt to limit discharge delays and resident work hour violations.

METHODS

- A “team” is comprised of an attending, resident, 3-2 intern, pharmacist, social worker, and medical students using 3-4 mobile computer workstations.
- Average appointment times were calculated through initial timing studies.
- Daily rounding schedules were generated before rounds based on prioritization:
  * 1st Priority: Unstable patients, 40 minutes
  * 2nd Priority: Discharges 15 minutes
  * 3rd Priority: Follow-up/hospital admitts, 20 minutes
- House staff were encouraged not to pre-round, with specific guidelines limiting what pre-rounding was acceptable.
- Flow rounds proceeded according to schedule with presentations, notes, orders, and consults entered at each bedside.
- Ancillary staff, patients, and family was updated on the daily care plan in real time.
- Arrival and discharge times were collected on rounds, while discharge times and resident duty hour violations were monitored electronically.
- Team discharge order entry times and discharge times were compared to flow rounds and non-flow rounds using independent two-sample t-tests.

RESULTS

- Figure 1: A visual representation of the new streamlined discharge process.
- Figure 2: A comparison of actual vs. anticipated patient flow.
- Figure 3: A comparison of actual vs. anticipated resident work hour violations.

DISCUSSION/BARRIERS

Flow rounds are an effective tool to rationalize the workload of a ward teaching service, resulting in earlier discharges and fewer resident work hour violations compared to traditional rounding methods. Similarly, the development of an Inpatient Clinic appears feasible, with our half of inpatient visits occurring within 15 minutes of predicted start time. While resident buy-in was initially limited, this improved as residents incidentally reduced floors pages from and busy staff. However, the interns continue to struggle to break the habit of pre-rounding. Dissemination of the daily schedule remains challenging, but we are in a position to utilize an electronic bed board. Our data is limited by the absence of baseline measures (e.g., length-of-stay), lack of patient satisfaction data, small sample size, and high inter-observer variance among attending.

Barriers limiting hospital-wide participation include:
- Emergency clinical situations
- Confidence in ancillary staff to communicate urgent needs
- Teaching conferences/scheduling
- Role of pre-rounding
- Residency/attendings' buy-in
- Quality of bedside education
- Dissemination of schedule to patients/staff
- Physical ward space for mobile computer workstations

CONCLUSION

The inpatient clinic is a bold and innovative idea that may drastically reduce bedside rounds and improve the quality of inpatient care. Transforming team rounds in this manner returns the work of medicine to bedside, allowing for mindful, patient-centered care.

REFERENCES

Pros & Cons of Prior Poster

- Clean
- Lots of graphs
- Little text
- Organized texts
Recap...

• Types/Categories of Posters:
  – Research Poster
  – Case Presentation Poster
  – Quality Improvement Poster
  – Patient Safety/Satisfaction Poster
Great Poster Elements

• Easy to read/follow
• Attracts viewer’s attention
• Communicates results of investigation
Quick Response Code

• QR Code
Poster Arrangement

• Timing:
  – Viewer able to glean message in 3-5 minutes
  – Viewer able to read text in 10 minutes

• Organization
  – Organization similar to scientific article
  – Poster describes findings of research project
How to Construct

• A single PowerPoint slide…
• Set size of single slide (not to exceed 46 inches X 46 inches)
• Use large font for text
• **BOLD** font (always)
• Check poster in zoom view to see true arrangement
Other points for Construction...

• **Use a template/software program**
  – Internet search “poster template”
  – Power Point format
  – Old poster – delete text, play with background, box/text sizes, format, images, color

• **The rough draft process**
  – 1st draft one month prior to conference
  – Considerations
    • Word count, prose style, grammar, fluidity, figure clarity, spelling, aesthetic appeal
  – Print on letter sized paper to assess layout challenges
Details on Poster Content
Research Poster

• **Title;** 2 lines or less
  – ≥ 72 pt. type, legible at 25 feet
  – Clear, concise, direct

• **Intro;** 200 words or less
  – ≥ 20 pt. type
  – Define the issue
  – Establish the purpose of your work
  – Justify your experimental approach
  – Provide a clear hypothesis

• **Materials and Methods;** approximately 200 words
  – Use figures and tables to illustrate experimental design
  – Use flowcharts to summarize timing of events
  – Include photograph or labeled drawing
  – Outline statistical plan
Results; approximately 200 words
– Provide qualitative/descriptive results
– Present analyses that specifically address the hypothesis
– Refer to charts or images

Discussion; approximately 300 words
– Remind the viewer of the hypothesis
– Discuss if/why results were conclusive
– Point out relevance of findings to other published work
– Discuss limitations of the work
– Highlight future directions of the research
Research Poster, continued

**Conclusion**: approximately two sentences
- Concise summary
- Reminds viewer of relevance

**References**
- Approximately 5-10 citations
- Standard format

**Acknowledgement**
- Assistance and financial support
Case Presentation Poster

• Title
• Introduction
• Case Presentation:
  – History of Present Illness
  – Hospital Course
  – Family History
  – Social History
  – Labs, Images, Studies
• Discussion
• References
Case Presentation Poster

- **Introduction** – briefly introduce type of condition/disease process – pathogenesis, etiology, microbiology, epidemiology if relevant

- **HPI** – classic academic history and physical. Age of patient, important past medical history, presenting complaint, events leading to presentation

- **Hospital Course** - pertinent (+) and (-) findings on physical exam, work up and treatment plan, involvement of consultants, clinical progress
Case Poster Continued...

- Family History
- Social History
- Pertinent Labs

- Images
  - Visual additions attract and inform viewers more effectively than text
  - Details on graphs and photos viewed from 6 ft away
  - Thin gray or black border around photos
  - Digital, high quality photographs - web images have poor printing resolution
Patient Safety & Quality Improvement Poster

- If an intervention/poll was performed on a group – research format
- If attention is being drawn to an issue or concern – vignette format
- Same general guidelines, room for creativity…see example from earlier
Team Approach to Palliation: Do No Harm!

Hamed Abbaszadegan, MD; Mona Amini, MD; Masood Kisana, MD
Banner Good Samaritan Medical Center/Carl T. Hayden Veterans Affairs Medical Center

Introduction

Palliation involves easing the severity of pain, non-pain physical symptoms, and improving overall quality of life when the disease process cannot be reversed. The fine line between knowing when to allow natural death, and when to continue aggressive interventions is often skewed. The palliative care team at the Phoenix VA Medical Center has vastly changed the approach to end of life care utilization in the last year by improving utilization by 25%

Higher healthcare expenses are utilized during the last year of life and are found to be mostly incurred in the last month of life. The utilization of palliative medicine is an important topic not just regarding healthcare expense, but is also significant when discussing patient safety when interventions will not change the

Patient is a 66 y/o Male with a 3 month history of progressive dysphagia to solids/liquids, and an associated significant weight loss. He was diagnosed with a metastatic esophageal adenocarcinoma with diffuse bony metastases confirmed by PET imaging. His symptom control became unmanageable at home secondary to recurrent hematemesis, fatigue, and anorexia to a point where a decision had to be made between aggressive interventions and allowing for natural death with dignity and comfort. Goals were established to control symptoms as a priority, as the metastatic cancer could not be reversed. By providing optimal pain relief, and relief of non-pain physical symptoms, aggressive agonizing interventions were avoided.

References

Conclusion

Terminal illness cannot be reversed. Once functional status declines to a point of irreversibility, palliation is an appropriate option for patient safety. Utilization through early involvement of palliative care improves quality of life, leads to less aggressive care, and results in longer survival. Research has shown that palliative medicine interventions not only improve survival, but are more effective than active treatment in many situations.

Advanced heart failure with recurrent exacerbations, advanced COPD, as well as cancers should be considered for palliation approaches as symptom management becomes the forefront of care. Families are often most satisfied with the care when they know their loved one has not been allowed to suffer needlessly.

Growth of Hospice Programs in U.S.
1974 to 2009

Patients Served by Hospice: 1984 to 2009
Judging

- Originality
- Case Presentation Methodology
- Visual Impact
- Interview (presentation)
KEY DEADLINE INFO

• Deadline: poster abstract submission deadline is at **midnight on September 15, 2015**.

• Program Director/Faculty mentor must approve your abstract **BEFORE** you submit the abstract.

• Submit @  
  [http://www.acponline.org/about_acp/chapters/az/abstract15.htm](http://www.acponline.org/about_acp/chapters/az/abstract15.htm)
KEY POINTS...

• **Corrections:** Once we have passed the submission deadline, your abstract cannot be altered. The accepted abstract will appear as submitted to the reviewers and later in an electronic journal compiled by the Chapter.

• **Word Count:** 450 words (10 point font). You do not need to use up your word count repeating information already collected.
KEY POINTS...

• **Poster Size.** may not exceed 46” x 46”

• **Prizes; National Stipend:** the Chapter awards 1\textsuperscript{st} prize of $150, 2\textsuperscript{nd} prize of $100, and 3\textsuperscript{rd} prize of $50 to the winners in each of the categories.
KEY POINTS...

- **Scholarship:** the Research poster & Oral Clinical Vignette winner will receive a $1,000 travel reimbursement stipend and be reported to National as the Chapter winner and receive an automatic acceptance to poster present at National.
KEY POINTS...

• ACP Membership; Registering to Attend the Meeting: to present, you must be an ACP Member and must register to attend the meeting.

• Programs often pay for this cost

• Medical Students may join the ACP for free, and this year, the meeting registration is free up front (no after the meeting reimbursement required).
THANK YOU!

• Contact information:
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