Visual Abstract 101

Kara Gavin, Media & Policy Public Relations Manager
Emily Smith, Multimedia Designer
After this session you will know…

1. the term “visual abstract” (if you don’t already)
2. the history behind them
3. how to create an effective message
4. how to create a visual abstract
5. where to find the resources you need for creating visual abstracts
6. how to disseminate your visual abstract
What is a visual abstract?
What is an **visual** abstract?
Abstract

a summary of the contents of a book, article, or formal speech.

Source: dictionary.com
Out-of-Network Bills for Privately Insured Patients Undergoing Elective Surgery With In-Network Primary Surgeons and Facilities

Karan R. Chhabra, MD, MSc; Kyle H. Sheetz, MD, MSc; Ushapoorna Nuliyalu, MPH; Mihir S. Dekhne, MS; Andrew M. Ryan, PhD; Justin B. Dimick, MD, MPH

IMPORTANCE Privately insured patients who receive care from in-network physicians may receive unexpected out-of-network bills ("surprise bills") from out-of-network clinicians they did not choose. In elective surgery, this can occur if patients choose in-network surgeons and hospitals but receive out-of-network bills from other involved clinicians.

OBJECTIVE To evaluate out-of-network billing across common elective operations performed with in-network primary surgeons and facilities.


EXPOSURE Patient, clinician, and insurance factors potentially related to out-of-network bills.

MAIN OUTCOMES AND MEASURES The primary outcome was the proportion of episodes with out-of-network bills. The secondary outcome was the estimated potential balance bill associated with out-of-network bills from each surgical procedure, calculated as total out-of-network charges less the typical in-network price for the same service.

RESULTS Among 347,356 patients (mean age, 48 [SD, 11] years; 66% women) who underwent surgery with in-network primary surgeons and facilities, 20.5% of episodes (95% CI, 19.4%-21.7%) had an out-of-network bill. In these episodes, the mean potential balance bill per episode was $2011 (95% CI, $1866-$2157) when present. Out-of-network bills were associated with surgical assistants in 37% of these episodes; when present, the mean potential balance bill was $3633 (95% CI, $3384-$3883). Out-of-network bills were associated with anesthesiologists in 37% of episodes; when present, the mean potential balance bill was $1219 (95% CI, $1049-$1388). Membership in health insurance exchange plans, compared with nonexchange plans, was associated with a significantly higher risk of out-of-network bills (27% vs 20%, respectively; risk difference, 6% [95% CI, 3.9%-8.9%]; P < .001). Surgical complications were associated with a significantly higher risk of out-of-network bills, compared with episodes with no complications (28% vs 20%, respectively; risk difference, 7% [95% CI, 5.8%-8.8%]; P < .001). Among 83,021 procedures performed at ambulatory surgery centers with in-network primary surgeons, 6.7% (95% CI, 5.8%-7.7%) included an out-of-network facility bill and 17.2% (95% CI, 15.7%-18.8%) included an out-of-network professional bill.

CONCLUSIONS AND RELEVANCE In this retrospective analysis of commercially insured patients who had undergone elective surgery at in-network facilities with in-network primary surgeons, a substantial proportion of operations were associated with out-of-network bills.
Visual abstract

A visual summary of the information contained within an abstract.
Visual abstract

A visual summary of the information contained within an abstract.

Out-of-Network Bills for Insured Patients Undergoing Elective Surgery With In-Network Surgeons & Facilities

20% of cases had out-of-network bills

$2,011 average potential balance bill

Assistants & anesthesia issue 37% of out-of-network bills

Chhabra KR et al, JAMA 2020;323(6):538-547
Where did visual abstracts start?
At Michigan!

Assistant Professor Andrew Ibrahim, MD, MSc, during his RWJF Clinical Scholars time, in his role as social media editor of the Annals of Surgery
A “movie trailer” for research

• Catch the eye
• Draw reader to the full paper
• Accompanied by link to paper
• Convey key messages and citation info

Visual Abstracts Increase Article Dissemination: a prospective, case-control crossover study

IMPRESSIONS x7.7 fold
RETWEETS x8.4 fold
ARTICLE VISITS x2.7 fold

3k → 23k (No. of times a Tweet was seen)
11 → 92 (No. of times a Tweet was shared)
65 → 175 (No. of Article Visits via link click)

Adoption

• **First ones:** July 2016
• **May 2017:** 20 major journals
• Now, 95+ journals create or ask authors to create (including CDC, BMJ, JAMA, NEJM)
• Many others doing them
• [#VisualAbstract](https://twitter.com) on Twitter
Making a Visual Abstract: Crystallizing your message
Finding the essential points

- Start with your abstract
- Try an ‘elevator speech’ out loud
- Keep boiling!
- Key components:
  - Title that grabs
  - Main findings in numeric/icon form
  - Population
  - Process/intervention
  - Data sources, caveats
  - Citation & logo(s)
Level of language

• Who’s your audience?
• Clear headline: Why should they stop to look?
• What jargon can you avoid or explain?
• Where can you substitute icons or numbers & arrows for words?
Choose your variety

- Number of outcomes
  - Need to show randomization, process or intervention?
  - Can icons & a few numbers tell most of the story?
- Figure and quote
- Qualitative list
If this were a talk, what would you want audience members to remember?
What makes up a visual abstract?
Components of Effective Visual Abstract

Survey of 1,033 Surgeons: Barriers to Developing Surgical Scientists...

- Pressure to be Clinically Productive: 88% (Percent of Surgeons)
- Excessive Administrative Duties: 64% (Percent of Surgeons)
- Concern about Work-Life Balance: 60% (Percent of Surgeons)

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<td>![Files and Documents]</td>
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Designing a visual abstract
Design Principles

1. Contrast
2. Repetition
3. Alignment
4. Proximity
Design Principles

1. Contrast
2. Repetition
3. Alignment
4. Proximity
Show the differences.

CONTRAST
c contrast

c contrast
c contrast

c contrast
c contrast

Contrast
Contrast

contrast
contrast

contrast
contrast
Opioid Prescribing Guidelines for Chronic Pain: Do They Improve Outcomes?

Guidelines aim to:
- increase effectiveness of pain treatment
- reduce risk to patients
- improve communication between patients and providers

Opioid prescribing is declining

Guidelines may change prescriber behavior, even without enforcement

What are health systems using in place of opioid analgesics?

Based on presentation by:
Amy Bohnert, PhD, MHS
Associate Professor, Psychiatry, University of Michigan
Research Investigator, The Center for Clinical Management Research, Department of Veterans Affairs

Opioids: Policy to Practice
#OpSummit19
Avoid underlining

If you want to call attention to words, find a way to emphasize it other than underlining it.

Hyperlinks are OK because there is a purpose and it is universally recognized.
Hospitals with Higher 90-Day Bundle Payments for CABG Procedures...

High payment hospitals had...

- **Post-acute Care**: 4x higher utilization of inpatient (vs. outpatient) rehabilitation
  - 13% vs. 3% (percent of patient using inpatient rehabilitation)

- **Physician Payments**: 2x higher use of inpatient evaluation and management (E&M) services
  - 1.5 vs. 0.7 (number of inpatient E&M claims per day)

- **Readmissions**: 2x higher rate of patients with multiple readmissions
  - 7% vs. 4% (percent of patient with multiple readmissions)

Citation (include author, title, journal, date).
Design Principles

1. Contrast
2. Repetition
3. Alignment
4. Proximity
Hospitals with Higher 90-Day Bundle Payments for CABG Procedures...

- **Increased Post-Acute Care**: x4.4 (13% vs. 3%) utilization of inpatient (vs. outpatient) rehabilitation.
- **More Physician Payments**: x2.4 (1.5 vs. 0.7) use of inpatient evaluation and management services claims per day.
- **Increased Multiple Readmissions**: x1.8 (7% vs. 4%) rate of patients with multiple readmissions.

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Harvard University
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Living Through a Disaster Leads to Less Healthy Behaviors

20,671 Individuals
59,450 Interviews
1,451 unique disasters
60% exposed

16% less likely to be physically active
21% more likely to gain weight

Sue Anne Bell (@sueannebell) et al. PreHospital and Disaster Medicine (In Press).
Finding images

Google
Noun Project
Shutterstock
Getty Images

Do not use images if you do not have permissions or rights!
File type: png (transparent background)

Usage rights: free to use or share
Icons for everything

Over a million curated icons, created by a global community

Search for anything

Over 1 Million icons, royalty-free

Get icons in your workflow

Customize any icon for the perfect fit

Learn more

Check out the apps

Try it out
Doctor

By Wilson Joseph
In the Doctor, Medical, Physician, Healthcare Vector Icons Collection

No need to attribute, you're NounPro

Download Icon

PNG  SVG

1200px x 1200px

Save for Later

Related Searches:
Doctor, Consultant, Medical, Physician, Health, Hospital

You may also like:
Check out the Noun Project add-in via PowerPoint!
Finding the right images

• Identify the best visual to depict the information (the first choice is most likely not the final choice).
• Keep the audience in mind.
• Keep visual style in mind.
  • Departmental/unit brand colors
  • Solid colored icons vs cartoon-like images (ie. Clip Art)
The University of Michigan’s brand identity is one of our most valuable assets. It is recognized worldwide and immediately connects us with the hearts and minds of our audiences.

We encourage you to use the useful tips, guidelines and resources on this site to keep our brand consistent and strong.
Before & After
Hospitals with Higher 90-Day Bundle Payments for CABG Procedures...

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Living Through a Disaster Leads to Less Healthy Behaviors
Sue Anne Bell (@sueannebell) et al. PreHospital and Disaster Medicine (In Press).

In a national longitudinal cohort
20,671 Individuals
59,450 Interviews
using Health and Retirement Study data (@HRSISR) combined with Federal Emergency Management Agency disaster declaration data

Comparing those who experienced a disaster versus those who did not
1,451 unique disasters
60% exposed

16% less likely to be physically active
21% more likely to gain weight

adjusted odds ratio, change over time in health risk behaviors adjusting for many potential confounders

National Institutes of Health
SCHOOL OF NURSING
UNIVERSITY OF MICHIGAN
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adjusted odds ratio: .84

Live Through a Disaster Leads to Less Healthy Behaviors

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Disseminating a visual abstract
Twitter

- Tweet it as soon after paper/talk as you can!
- ALWAYS include a link to your paper
- Tag your co-authors, mentor, journal, funding agency, center/department/program
- Use common hashtags for the topic & #VisualAbstract
  - Visit www.symplur.com/healthcare-hashtags/
- Share several times over the next week
- Ask others to share
- Share again when the work is timely

Check out @AdamMarkovitz’s article in this month’s @Health_Affairs: the MSSP has deterred ACOs from coding more intensely d/t not upwardly adjusting benchmarks; high risk beneficiaries still left the MSSP at a significantly higher rate than median risk bit.ly/2RHqLbI

Other means

• Make a LinkedIn post and embed it
• Use it as a slide in talks
• Embed it on your professional profile
• Share by email
• Share with center/department/institution communicator