About The Working Party

• Part of GI ROC
• Joint members of IFOA and CAS
• Goal of practical guidance
• What we have done
• What is next
“I produced a really interesting analysis, but no one wanted to read it. It actually caused them pain.”

“I review a lot of reports that could be better”

“see tense or negative relationship (with) others, partly due to reports obscure technical jargon and length so the info does not land well.”

“Am tired of being a reviewer of last resort. The accuracy of things submitted and their coherence can be an issue.”

“Helping companies deliver “adequate, appropriate, accurate” results can be a struggle. I am also interested in psychology/people aspects”

“Would love to help bring up the bottom of writing and analysis. GIGO. Good reports need sound underlying analysis like proper large loss treatment and no attempts to obfuscate.”

“Want to see if there is anything new to learn and am interested in storytelling in a more traditional application”
The Secret

Is a Dovetail

of Good Writing & Exhibits

and Good End-to-End Communication

Why Is It Secret?

How Do We Judge a Report Good?

Why Is Skilled Joining Important?

How Do You Make Exhibits Good?

How Does One Write Well?

What Is This?
Good Actuarial Report Agenda

1) A Poorly Hidden Secret
2) What Makes A Report Good
3) Joining Up All The Elements
4) Good Basic Writing
5) Good Practical Illustrations
6) Good End-to-End Communication
7) Discussion
Which of the following describes the tone and language you typically encounter in actuarial reports:

- Very technical but with some attempt to give explanation: 53%
- Littered with jargon that is not explained: 29%
- Clearly explained: 6%
- Confusing: 6%
- Other (please specify): 6%

22 September 2014
When comparing actuarial reports over different periods, which of the following typically applies:

- I don't generally compare reports from different periods: 19%
- Can appreciate any changes to the methodology or layout of the report: 6%
- Easy to compare like for like results: 25%
- Can broadly compare, but bases not consistent: 31%
- Almost impossible: 19%
How often will you read more than the Executive Summary of an actuarial report?

- Always: 35%
- Often: 35%
- Rarely: 29%
- Never: 0%
Will you read/review the main body of the report in full?

Let’s Optimize This!
Will You Read/ Review Information Provided As An Annex Or Appendices?

Chart Title

- Always: 24%
- Only if < 5 pages: 12%
- Only if < 10 pages: 12%
- Only if < 30 pages: 6%
- Rarely / Never: 100%

But Improve That!

Series 1: 
- Always: 24%
- Only if < 5 pages: 12%
- Only if < 10 pages: 12%
- Only if < 30 pages: 6%
- Rarely / Never: 100%

Series 2:
- Always: 35%
- Only if < 5 pages: 47%
- Only if < 10 pages: 53%
- Only if < 30 pages: 47%
- Rarely / Never: 100%
Regulatory Concerns Sometimes Overshadow Management Needs

“In many cases, because the focus of the actuarial report is related to the completion of the audit and the strict timelines attached thereto.

The actuarial report will initially get read with a focus on those matters that relate to the opinion.

Therefore, it is possible that management and other recommendations coming out of the report, though important, are not given the priority they deserve.“
Readers Want A Voice But Are Blocked By Unfamiliar Language and Too Many Technical Details

“When an actuary discusses things with an underwriter in a report, the language they are reading should be in language that leads them to have a clear voice in having input. As the level of information increases, most are loath to put their hands up (and make comments).“
There is More To a Report Than How You Write It

“It is not always clear that actuaries understand what outside factors could change the situation.”

“Too much emphasis by actuaries on predicting. Not all risk factors have really been considered.”
While vital to employers’ businesses, there is a sense that actuaries can be insular, and some do not relate their work to the broader needs of the business.

**BENEFITS AND DISADVANTAGES**

**Positive**
- Very intelligent
- Unique skills
- Very strong mathematically
- Good actuaries combine maths with other skills

**Negative**
- Expensive
- Can be elitist
- Bad communicators
- Can lack business acumen

"What are the advantages and disadvantages of employing an actuary?"

"The benefit of employing an actuary is that they will have the rigour and depth."

Employer

"Actuaries really don't like working for non-actuaries... actuaries think they’re special, better."

Employer
But it is Improving

GI ROC 2014 Survey (Sarah MacDonnell, LCP)

Improvements in the last 7 years? Yes!!

… Better data drives better estimate

… Better modelling in some sectors

… >>>> Better communication but still not perfect <<<

BUT: “being forward looking and improving communication could be the next step according to nearly all participants!”

WE THINK THAT BETTER COMMUNICATION AND LISTENING DURING OUR ANALYSES WILL HELP US WRITE BETTER REPORTS
Making Ideas Stick – Chip and Dan Heath:
“The Curse Of Knowledge”

Once you know something, you can no longer imagine what it is like not to know it and thus are unable to explain it well.

Just read the book!
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## Desired Outcome For Readers:

<table>
<thead>
<tr>
<th>Desired Outcome</th>
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</thead>
<tbody>
<tr>
<td>Fair And Reasonable Assessment</td>
</tr>
<tr>
<td>Understand Conclusions And Their Context</td>
</tr>
<tr>
<td>Actionable</td>
</tr>
<tr>
<td>Empowered To Compare And Challenge Results</td>
</tr>
<tr>
<td>Complements World View</td>
</tr>
<tr>
<td>After Reading Can Explain Report To Someone Else</td>
</tr>
<tr>
<td>Professional Feel</td>
</tr>
<tr>
<td>Desired Outcome For Writers:</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Clear and useful report</td>
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<tr>
<td>Staged for improvement</td>
</tr>
<tr>
<td>Satisfied but aware of limitations</td>
</tr>
<tr>
<td>Knowledge gain</td>
</tr>
<tr>
<td>Meets professional and regulatory requirements</td>
</tr>
<tr>
<td>Report builds perceived value and trust by stakeholders</td>
</tr>
</tbody>
</table>
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Joining It Up: A Dovetail of Good Writing & Exhibits and Good End-to-End Communication

Philosophical Challenge:
GI ROC member: “I’d observe that the emerging challenge, to better communicate, is a lot deeper than a good piece of text or chart, but is about developing an effective process of engagement and influence.”

Practical Challenge:
By expanding communication and analytic steps to better consider multiple viewpoints on the same issue, the complexity of doing an analysis and writing a report is increased, but the extra work is necessary if the goal is a Good Actuarial Report

For Great analogous discussion see Improving the structure and content of psychiatric reports for sentencing  Rosie McLeod, Anna Sweeting, Roger Evans http://www.ohrn.nhs.uk/resource/policy/ImprovingPsychiatricReports.pdf
Practical Challenge: Joining It All Up

There are several observations here.

• Craftsmanship is needed. There is no recipe to follow, but there are principles, realities, goals and constraints to navigate.

• We build value by our skill in achieving a good balance in how the disparate elements are effected joined.

• There may be opportunity for a “house” or personal style.

Does thinking about it the below way help?

• Begin simply and with subsets (not the whole)

• Build in each dimension part way

• Prioritise and figure out how to marry them

• Extend and embellish the structure as you gain momentum
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22 September 2014
Good Basic Writing

A. Know What You Plan To Conclude (And How You Arrived At It)
B. Decide On A Structure
C. Make Your Explanation User Friendly
D. Write A Summary That Can Be Read On Its Own
E. Details: An Effective Cover Letter, “Next Steps”, And Appendix
F. Get Feedback
A) Know What You Plan To Conclude (+Organize)

Know in advance what is most relevant via considering:

• Your “commission”

• **Important** extra findings found along the way

• Stakeholder expectations

Organize your support logic

• Main analytic steps and enabling assumptions (things needing to be true)

• Alternative methods/assumptions (what else might you have done?)

• Your reasoning given the above (e.g., “I checked the alternative and it had a worse fit”)
B: Decide On A Structure

• Top down for most circumstances (a.k.a. Hypothesis Approach)
  – Start with the essential message - don’t leave it to the end
  – Follow that with the material that supports the main message
  – Then the facts that support those statements
  – Explain and define things where needed


or for a journalistic perspective: UNESCO’s Story-Based Inquiry A Manual for Investigative Journalists (free download from: http://unesdoc.unesco.org/images/0019/001930/193078e.pdf )
B: Decide On A Structure (Continued)

- Something else
  - Odyssey (Picaresque) “The sequence of events in time is less important than the story’s movement through successive places each of which decisively influences actions” (see: Story Based Inquiry)
  - Others, like storytelling which is best for very complex situations (a work in progress)

- But not bottom up (unless your audience proscribed it that way or you are dealing with actuaries)

Finally: Are we going PowerPoint and IPAD?
C: Make Your Explanation User Friendly

Style

• Use your own voice
• Do not overload sentences “(…)”; “71 words long”; “which”; “,…,”
• Don’t be bossy with: Compare, Consider, Note that, or Remember
• Vary the length of sentences to avoid monotony
• Avoid, but explain abbreviations
C: Make Your Explanation User Friendly

Substance

• Don’t simply make assertions Spell out the implications
• Don’t simply state outcomes: explain the implications of the outcomes,
• Explain your exhibits before you present them
D: Write a summary that can be read on its own

• A **good** summary is “free-standing”
  – It can be read without having just read the full report

• The **most effective** summaries are written as a foretaste not a recap

• Does your summary pass the CEO test?
  – Imagine someone senior reads the summary and nothing else
  – Will your summary give them a fair reflection of the content (amount, quality of analysis, quality of reporting)?
  – If the report is about selecting from a range of options, does the summary mention only the recommendation or indicate the options discussed?
E: Cover Letter, “Next Steps”, And Appendix

• Cover letter: caveats and “business” go but no summary or analysis
• Next Steps: make it easy for them to use the report findings
• Appendices: don’t overuse reference to appendices. Is this where regulatory overflow goes?
• For file: It could go here if it does not need to e in the report?
F: Get Feedback

• What should we do more of?
• What needs better explanation?
• Do you want less detail or more?
• Were there any parts of the analysis you want to be more involved in?
• What actions did you take and why?
• Etc.
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A picture worth a thousand words?

There are consequences:

It takes the space of several paragraphs
-so it better be worth it.

*It takes time to read and comprehend*

*It may be there to hide the fact that you have nothing to say*

**IT NEEDS A HYPOTHESIS**

Charts can distort things while trying to make your point
Graph And Chart Logic

• Most poor graphs and charts have no clear hypothesis
• Stick to relationships, trends or convenient lookups
• Make clear what is the variable and what are the primary and subsidiary outcomes against the variable
• Area comparisons are difficult so avoid thing like pie charts and stacked bar charts
• As a rule, include the origin
Graphs and Charts: Extra Edge

• Provide visual cues to decipher and show them how to
• Use visual language to emphasize (line weights, colours, arrows)
• Explain encodings: legends, axis names, colour keys
• Don’t forget aesthetics visually pleasing illustrations grab attention and make memorable images
**Focus Audiences attention:**

- **Data is the king**
  - ruthlessly remove the rest (unnecessary labels, formatting, other visual clatter): try to achieve eloquence through simplicity.

- **Use Visual layers**
  - dashed line, normal line, double line: Bring most important data series on top

- **Storytelling techniques**
  - series of zoom-in charts, minor animation, workflows
Graphs – Emphasise range of possibilities

- Eye while reading moves from left to right and from top to bottom
  - It affects how you sort years axis (first year on the left) and where you display legend relative to chart area
- Luminance is a primary info source for the eye while Hue and Chroma are secondary
  - It means that you should get contrasts and line weights right before applying colours – always check how your chart looks in grey scale.
  - It also means that shades of the same colour accentuate similarity while different colours infer belonging to a different group or value
  - It also means that while change in shade or hue will be noticed and can be used to display values rather than groupings – it would the very imprecise way to do so.
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Actuarial Control Cycle

Environment

Specify Problem

Monitor the Experience

Develop Solution

Professionalism
Actuarial Communication Cycle

Environment

May Need Two-Way Exploration to Help Agree Problem

Build Mental Model

Specify Problem

Monitor the Experience

Develop Data

Communicate Result

Develop Solution

Partial Contra Flow

The Communication From Another Process

Becomes Data to Audience

Professionalism

Audience Context

Analysts Context

Monitor the Experience

Specify Problem

Develop Solution

Professionalism
Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.