Going lean in healthcare information development

Increasing gains, reducing uncertainty, and working with non-technical teams

-or-

"How to dance with them that brought you"

- Who are Macmillan Cancer Support?
 (and what do they make?)
- 2. How Macmillan used to make things
- 3. Why it was good (but also... not so good)
- 4. What we did next
- 5. Why it worked
- 6. What we learned

1.
Who are
Macmillan
Cancer
Support?

and what do they make?

Who are Macmillan?

From their website:

"Macmillan Cancer Support
provides specialist health care,
information and financial support
to people affected by cancer."

Information Development Team

Creates independent, expert, up-to-date information to meet the information needs of people affected by cancer.



Information Development Team

General information on:

- over 60 types of cancer
- current treatments
- side effects
- late effects
- diet / eating difficulties
- money / work / benefits
- insurance
- coping with emotions
- changes to appearance
- co-morbidities
- end of life (wills, DNRs)

In the following formats:

- printed booklets
- leaflets / flyers
- z-cards
- audiobooks
- web
- information prescriptions (via NHS)
- ebooks

Information Development Team

That's something like 200 separate publications, another 200 specialist information items, and a website with over 900 pages to maintain.

All reviewed and re-published in a rolling cycle that repeats every 2.5 years.

2.
How
Macmillan
used to
produce
information

Highest quality assurance

Every publication is written by experts

All writers have current professional certifications

Every publication is reviewed by experts

Nothing goes
without review by
a subject matter
expert practicing
oncologists, CFAs,
etc.

Every step is auditable

All publications are in compliance with NHS Information Standard guidelines for quality health care information



Specialized production teams

Writers

Subject specialists

- Cancer and oncology nurses
- Benefits and financial aid advisors

Editors

Plain English specialists

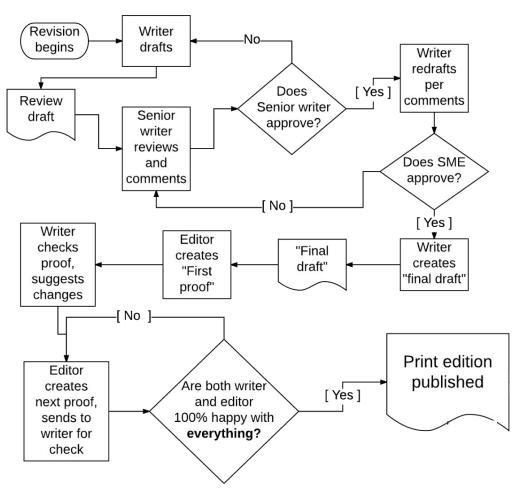
- Grammar experts
- Layout and design work

Subject matter experts

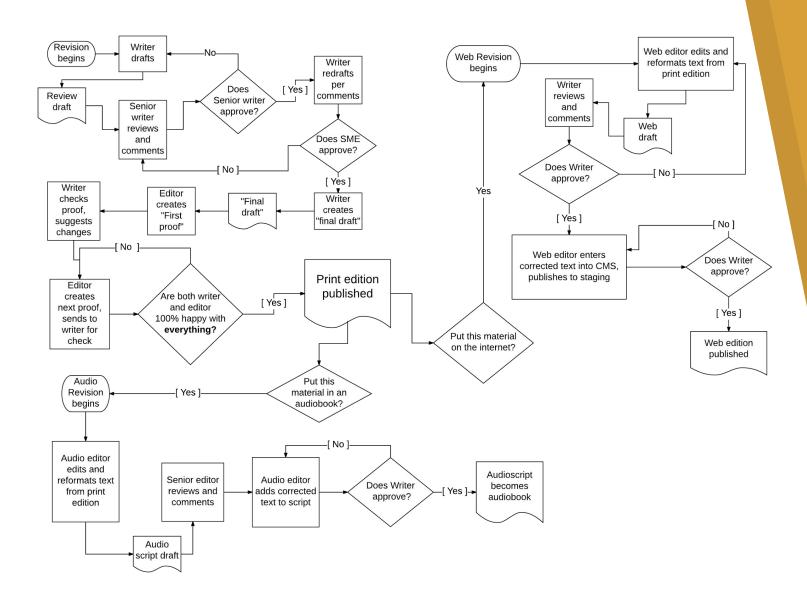
- Doctors
- Lawyers
- Benefits specialists
- etc

These are my immediate clients

How we produced information



How we produced information



3.Why it was good

(but also... not so good)

Good: expert attention paid to every step

Problem: expert attention repeated at every step

...on every line of every document

....regardless of when, how or if that attention was needed

...without awareness of other teams, publications or outputs

Good: robust booklet production process

Problem: using that same process for everything else too

Writers write booklets. Editors edit booklets. Booklet goes to press.

Then writers and editors remake booklets into another thing, using exact same processes as booklets.

Good: top-quality info regularly updated

Problem: no space for process change

4 to 8 titles due each month

Most titles had end-to-end production time of 9 months - 30% of a 2.5 year lifespan

No room for delays and no scope for process improvement

Publish once, create once.

Publish again, re-create everything again?

- Lots of repeated work
- Uncontrollable bottlenecks
- Uncontrolled variations
- Inefficient use of resources

4. What we did next

New CMS - new opportunity

3 staff assigned to migrate Care & Support content into that CMS.

Their only instructions:

"Macmillan makes booklets – find a way to get that booklet information into the new CMS."

Identify limits - What are the ground rules?

No budget for:

- external writers
- extra editors
- new authoring or layout software
- external training

No changes to:

- publication schedule
- expert approval process
- writing staff
- authority structure of team

Identify resources - What do we have to work with?

Materials

- One year's worth of publications (content)
- 1/2 of web content based on those publications
- New componentbased CMS
- Approximately 14 months to show benefits

People

- Existing teams of writers and editors
- ▶ 3 CMS staff
- No IT or development support, though

Set goals within those limits

- Identify "clients"
- 2. Maintain quality for clients
- Reuse material as often as reasonable (reduce work required)
- Get the most from team by relying on existing strengths (minimize retraining where possible)

Create "minimum viable products"

The smallest thing we can make which:

- Tests our ideas about what we make
- Improves what we give our "clients"
- Gives an opportunity for feedback

Our minimum viable products

- A set of standard texts but only for topics found in multiple cancer types
- A method to get those standard texts into publications (which fits into existing production processes)

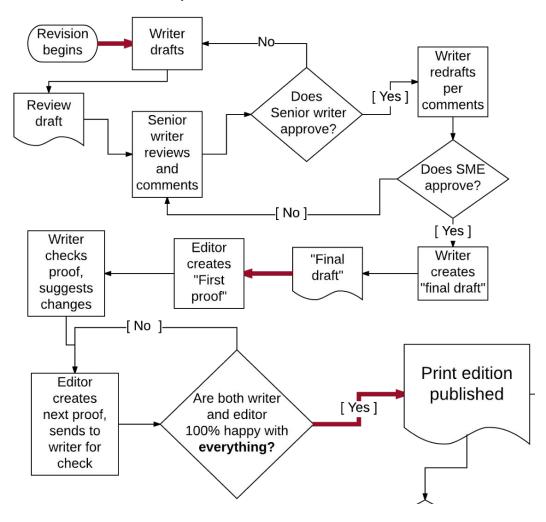
Create minimum viable product

To make the standard texts:

- 1. Dissect each publication
- 2. Identify every topic discussed in every publication.
- Sort by what's unique to each publication, vs what seems to be reused

Create minimum viable product

Find handover points to insert materials:



Test and evaluate

Insert material into first titles

Collect writer and editor feedback

Use feedback to improve second batch of standard texts

Measure time saved (word count of reused material)

Bask in how much time and effort you've saved for the writers and editors

Stop basking. Get back to work

Add more topic areas. Run process again. Evaluate results.

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5. Why it worked

Minimized Disruption

Changes should disrupt BAU as little as possible.

Understand the production path and the teams involved to minimize disruption.

(...Unless you have enough leverage to justify interruptions to business as usual?)

Specialists continue to specialize

Understand what they do and the limitations they work within.
Use that to inform your plans.

(Don't rely on your oncology nurses learning XML and adopting structured authoring)

Aggregated marginal gains

Increase in reused content

Understanding colon cancer	E1	E2	E3
Total word count	17,916	19,061	14,190
Reused content word count	-	3,614	5,262

Understanding CLL	E6	E7	E8
Total word count	12,215	12,544	13,040
Reused content word count	-	3,191	4,236

Understanding breast cancer	E9	E10	E11
Total word count	23,400	19,737	18,539
Reused content word count	4,130	5,427	6,020

Aggregated marginal gains

End of 14 month period

12,480 words

86 reusable topics

Building trust in team processes and goals

Aggregated marginal gains

New process improvements (MVPs)

2nd iteration

standard
InDesign
templates for
IPs
(mix & match
handouts
distributed
via NHS)

4th iteration

InDesign templates for booklet layouts

7th iteration

Document
naming
convention and
version control
for department

6. What we learned

Avoid high-cost, high-effort changes

No silver bullets - many small alterations

Incremental changes and iterated improvements

Focus on points of minimum friction

Start with low-hanging fruit

First change made - low cost and immediate return.

Standardizing 12 topics for reuse - approximately 1100 words total

Those topics could be reused in 55 of 60 titles about cancer

Successful proof of concept led to support for more changes

Tell people how it benefits them

At least 20% of time was spent on communications.

Most successful communication involved:

- 1. How we could make their work easier (or better)
- 2. What they'd have to do differently
- How those changes would benefit readers
- 4. How those changes would benefit other teams

Maximum transparency

Publicly explain in simplest possible terms - Secrecy will **not** help

- Write up the process in plain language
- Include drafts, prototypes, test cases
- Make a top-level summary too
- Make it all available to everyone

Conclusion

Work with what & who you've got

Writers & editors are your clients and suppliers - treat them accordingly

Look for fixes everywhere

...but first implement at points of lowest cost

Iterate and repeat

The workflow never stops, you shouldn't either. Don't give up on making things better.

Thank you for your time!

For more about Macmillan, visit <u>macmillan.org.uk</u>

You can reach me at www.linkedin.com/in/taradash