

ARCC

Canadian Centre for Applied Research in Cancer Control

Advancing Health Economics, Services, Policy, and Ethics

Non-medical costs from patients receiving oral cancer surgery

Interim Analysis from the COOLS Trial

Ian Cromwell, MSc

**Sonya Cressman, Catherine Poh, Scott Durham, Miriam Rosin, Stuart Peacock,
COOLS Trial Study Group**



The Terry Fox Research Institute
L'Institut de recherche Terry Fox



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The COOLS Trial

- Oral cancer incidence in Canada: 3600 cases / yr
- Treatment of oral cancer lesions involves surgery
 - Lesions currently visualized with white light
 - Development of novel tool using fluorescence visualization
- Health Economic component
 - Principal research question: *what is the cost-effectiveness of using FV-guided surgery, compared to standard practice?*

The COOLS Trial

- Development of national research team in 9 cancer centres across Canada



The COOLS Trial

- In the process of recruiting 400 participants
 - Severe dysplasia, CIS, invasive SCC (T1 or T2)
 - Randomized to receive surgery
 - Experimental group: fluorescence visualization (FV)
 - Control group: white light visualization (WL)
 - Will be followed until end of 2015
 - 6 week mark, then ever 3 months until 2-year mark, then every 6 months until end of study period

Health Economic domains

- **Costs of Surgery**
 - Resource utilization and unit costing
- **Indirect/Out-of-Pocket Costs**
 - Collected through questionnaire
- **Quality of Life**
 - Collected through questionnaire (EQ-5D, FACT H&N, Voice Handicap Index)

Findings

- Oral cancer recovery does not constitute a major financial burden to oral cancer patients following surgical management.

Cost Data Collection

- Non-medical costs through questionnaire
 - Time off work
 - Reduced productivity at work
 - Annual income
 - Out-of-pocket expenses
 - Caregiver costs

Cost Data Collection

1. Which of the following best describes your current status? (Check all that apply)

- Currently working an average of hours a week for months a year
- Student Seeking Employment Receiving Social Assistance
- On medial leave since: / / (YYYY/MM/DD)
- Retired since: / / (YYYY/MM/DD)
- Other (please describe): _____

2. Are you currently taking time off work?

- No (Go to Question 5)
- Yes, because of my mouth condition
- Yes, for another reason: _____

3. Please enter the last date that you worked before taking time off from work.

/ / (YYYY/MM/DD)

4. Do you expect to return to work within the next 12 months?

- Yes Maybe No

Cost Data Collection

5. On a scale from 0 to 10, please rate how your ability to do your job now compared to how able you were to do your job before the surgery. (Please circle on the scale.)

I cannot work

I can work just as well

0 1 2 3 4 5 6 7 8 9 10

INTERNAL USE ONLY

Patient's Ability to Work (0-10)

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6. What is your relation to your main support person ("caregiver") who has been helping you while you are dealing with your mouth condition?

I do not have a main support person (Go to Question 9)

Spouse

Children

Other relative

Friend/Neighbour

Community support person (please specify) _____

Other (please specify) _____

7. Approximately how much time was taken off from work by your main support person in order to care for your mouth condition?

None

Or:

[months]

[months]

[weeks]

[weeks]

[days]

[days]

8. Please describe the type of help that you received from your main support person ("caregiver"):

Cost Data Collection

8. Have you used any prescription drugs, over-the-counter medicines, or alternative therapies for your mouth condition?

- No
- Yes, and I was partially or fully reimbursed for them (e.g. provincial drug plan, private insurance, employer)
- Yes, I and/or my caregiver paid and it will NOT be reimbursed by my employer or a private insurance company.

If yes, please briefly describe the medicines and estimate how much you have paid:

\$.

9. How did you get to your appointment today? If you or someone travelling with you (companion) paid money for travelling, please indicate in the space provided.

- Roundtrip airfare \$. Not paid by self or caregiver
- Roundtrip bus/train fare \$. Not paid by self or caregiver
- Other form of public transit (e.g. charter bus, taxi) \$. Not paid by self or caregiver
- Car- Please estimate how far you drove for this appointment: km Not paid by self or caregiver

Please estimate the total **parking expenses** for this appointment

- \$. Parked for free Don't know Not paid by self or caregiver
- Lodging \$. Not paid by self or caregiver
- Meals \$. Not paid by self or caregiver
- Child care \$. Not paid by self or caregiver
- Other (please explain) _____ \$. Not paid by self or caregiver

Cost Data Collection

10. What was your individual income for the last year (gross income, before taxes)?

- | | | |
|---|---|---|
| <input type="checkbox"/> < \$20,000 | <input type="checkbox"/> \$60,000 to \$69,999 | <input type="checkbox"/> \$110,000 to \$124,999 |
| <input type="checkbox"/> \$20,000 to \$29,999 | <input type="checkbox"/> \$70,000 to \$79,999 | <input type="checkbox"/> >= \$125,000 |
| <input type="checkbox"/> \$30,000 to \$39,999 | <input type="checkbox"/> \$80,000 to \$89,999 | |
| <input type="checkbox"/> \$40,000 to \$49,999 | <input type="checkbox"/> \$90,000 to \$99,999 | |
| <input type="checkbox"/> \$50,000 to \$59,999 | <input type="checkbox"/> \$100,000 to \$109,999 | <input type="checkbox"/> Do not wish to answer |

11. What was the annual income of your household for the last year (gross income, before taxes)?

- | | | |
|---|---|---|
| <input type="checkbox"/> < \$20,000 | <input type="checkbox"/> \$60,000 to \$69,999 | <input type="checkbox"/> \$110,000 to \$124,999 |
| <input type="checkbox"/> \$20,000 to \$29,999 | <input type="checkbox"/> \$70,000 to \$79,999 | <input type="checkbox"/> >= \$125,000 |
| <input type="checkbox"/> \$30,000 to \$39,999 | <input type="checkbox"/> \$80,000 to \$89,999 | |
| <input type="checkbox"/> \$40,000 to \$49,999 | <input type="checkbox"/> \$90,000 to \$99,999 | |
| <input type="checkbox"/> \$50,000 to \$59,999 | <input type="checkbox"/> \$100,000 to \$109,999 | <input type="checkbox"/> Do not wish to answer |

Some preliminary results

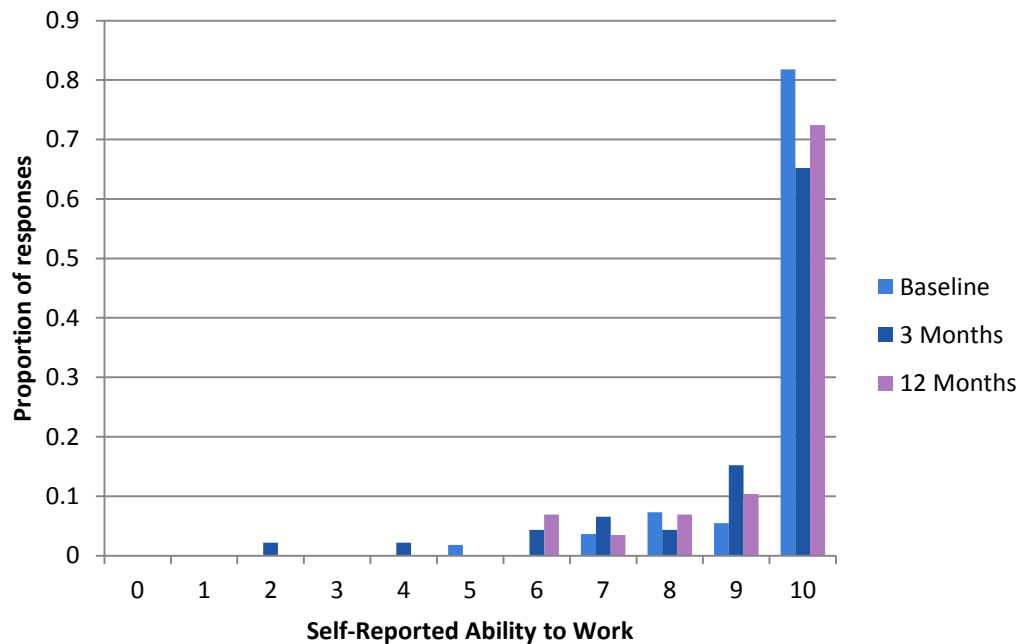
- Indirect costs
 - N = 209
 - 150 Baseline, 145 3-month, 66 12-month
 - Average age: 60.5 y
 - Gender split: 41% female
 - Median Household Income: \$30-40,000 /yr
 - Note: the plurality of respondents (41) preferred not to answer

Time away from work

- 41% of participants were working at the beginning of the study
 - 53% reported taking time away from work due to their oral condition at some point.
 - People who took time away took an average of 2.5 weeks off
 - Using frictionless Human Capital approach, time off was valued at \$160 on average

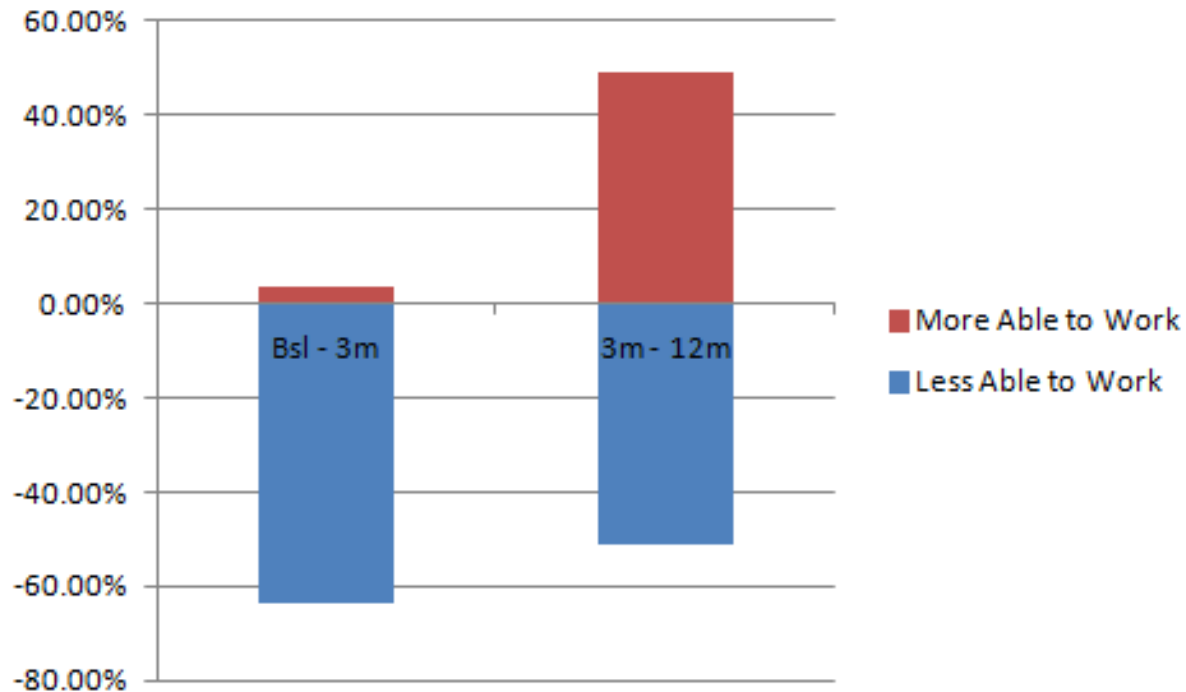
Productivity at work

- Majority of working participants did not report any disruption to their ability to work



Productivity at work

- How does ability to work change over time?

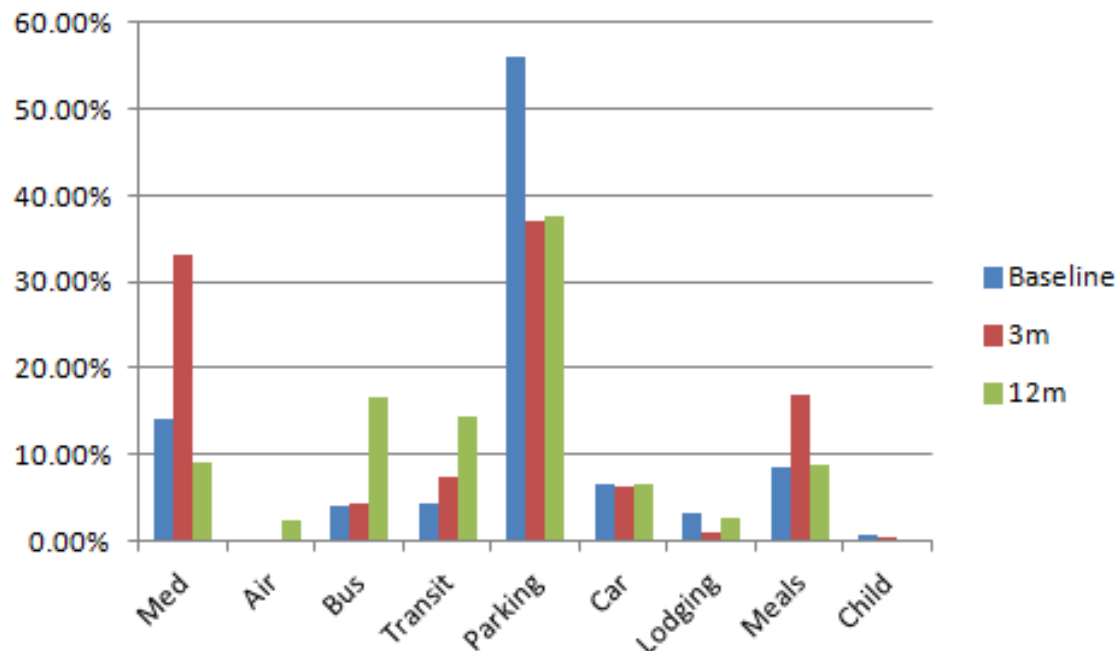


Out of pocket expenses

- 185 (89%) of respondents reported some out-of pocket costs
 - Average among those is \$110
 - (Range \$2.50 - \$1200)
 - Mean: \$65 baseline, \$83 at 3 months, \$75 at 12 months

Out of pocket expenses

- Out-of-pocket costs predominantly due to travel (70%; 55%; 78%)



Burden to caregiver

- 184 (88%) of respondents designated someone as a primary caregiver
 - Usually a spouse or family member
- Burden to caregiver (in terms of time off) was low, increased after surgery

Conclusion

- Oral cancer recovery does not constitute a major financial burden following surgical management.
 - People who work are generally able to return to work
 - Travel costs are present, but moderate
- Some people face significant burden

Conclusion

- Caveat: predominantly VGH site, as other sites continue to report, we will have more complete picture.
- Second caveat: still blinded to study intervention arm
- Third caveat: missing data

Next Steps

- Data collection continues until fall, 2015
- Exit interviews with some participants
- Linking of cost data to QoL Data – interesting research questions

Policy Implications

- Possible to identify patients who will experience high personal burden
- Can health regions create programs to mitigate financial impact?
- Physicians may be able to prepare patients for non-medical impacts

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THANK YOU

Stuart Peacock, Sonya Cressman

Catherine Poh, Miriam Rosin, Scott Durham

Alisa Kami, Shane Duan, Kelly Liu, Anita Fang

COOLS Trial team

COOLS Trial participants

ARCC BCCA team

Terry Fox Research Institute