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## Introduction

- Almost 45% of cancers are diagnosed in people of working age. The number of cancers in this age-group will rise with increasing focus on cancer screening and early detection.
- Most cancer patients who are in work at diagnosis take time off for treatment and recuperation. Return to work post-cancer is important for survivors, their families, employers and society.
- Although evidence is accumulating internationally on factors positively and negatively associated with workforce participation after cancer, most studies have been cross-sectional.
- We report initial results from the CaRE study, a longitudinal, population-based, investigation of cancer survivors' workforce participation in Ireland.

## Methods

**Eligibility:** The CaRE study design and methodology was based on the US Labor Market Outcomes Study. Individuals were eligible to participate if they were: diagnosed with incident breast, prostate or colorectal cancer; aged 18-64 at diagnosis; and employed or self-employed at the time of diagnosis.

**Recruitment:** Potentially eligible patients were identified through the National Cancer Registry Ireland around 12-16 weeks post-diagnosis. Patients' GPs were contacted to determine whether there was any reason the individual should not be invited to participate. Patients were invited to complete a pre-screening telephone interview to confirm eligibility (i.e. work status pre-diagnosis). Those eligible then underwent structured telephone interviews at 6-months and 12-months post-diagnosis. The final few subjects are currently undergoing 12-month follow-up.

## Aims

The aims of the CaRE study were to investigate:

- **patterns** of workforce participation at 6-months and 12-months after cancer diagnosis, including
  - whether took time off; whether in paid work; working hours; earnings; changed jobs/roles/responsibilities; length of absence; work ability/disability; presenteeism; job satisfaction; relationship with colleagues;
- **predictors** of workforce participation at 6-months and 12-months after cancer diagnosis, including
  - socio-demographic factors; economic factors; clinical factors; job/organisation factors; job commitment; job involvement; control over job tasks; job climate; role of employers; role of health professionals.

## Results

**Participants:** 621 survivors participated. 63% had breast, 31% prostate and 17% colorectal cancer. At diagnosis, 76% worked for an employer and 24% were self-employed. 34% worked ≤30 hours/week, 27% worked 31-39 hours and 39% worked ≥40 hours/week.

**Employment status at 6-months post-diagnosis:** Overall, 39% (244/621) of survivors were working at 6-months post-diagnosis (Figure 1). 28% of survivors continued working after diagnosis. Significant socio-demographic and clinical predictors of work continuation were: cancer site, work type, and receipt of chemotherapy (Table 1.) Of those who took time off, 15% had resumed working by 6-months post-diagnosis. Significant predictors of work resumption at 6-month were: sex; work type; and receipt of chemotherapy (Table 2).

**Employment status at 12-months post-diagnosis:** Overall, 65% of survivors were working at 12-months post-diagnosis (Figure 2).

Figure 1: Work status at 6-months post-diagnosis

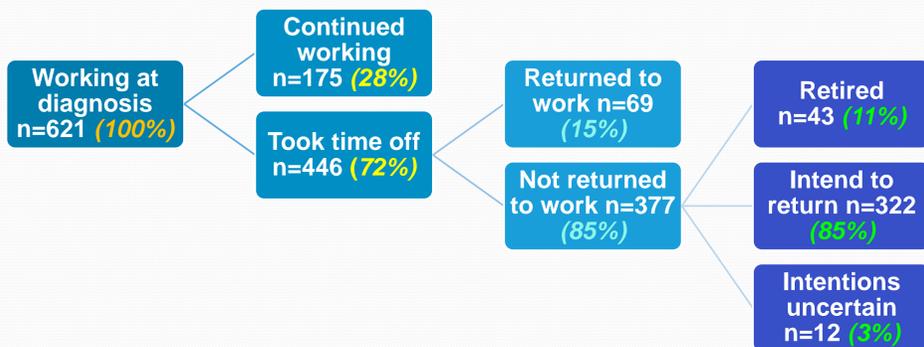


Table 1: Significant socio-demographic and clinical predictors of continuing to work post-diagnosis: results from multivariate logistic regression among all subjects

		% continuing to work	Odds Ratio*	95%CI
<b>Cancer site</b>	Breast	16.0%	1	-
	Colorectal	25.2%	1.44	0.82-2.52
	Prostate	50.8%	2.17	1.29-3.64
<b>Work type</b>	Employee	21.7%	1	-
	Self-employed	51.2%	2.70	1.73-4.21
	Other	35.0%	1.43	0.53-3.85
<b>Chemotherapy</b>	Yes	12.8%	1	-
	No	42.7%	3.00	1.79-5.02

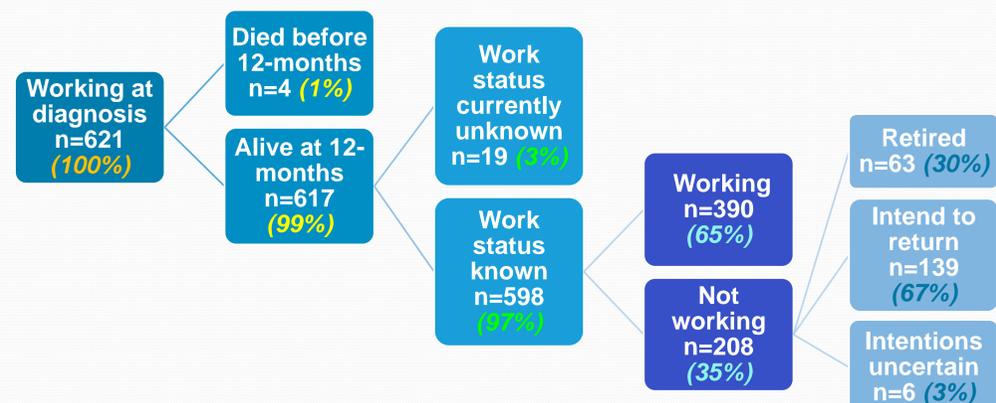
\* odds ratios mutually adjusted

Table 2: Significant socio-demographic and clinical predictors of resuming work by 6-months post-diagnosis: results from multivariate logistic regression among all subjects who took time off

		% resumed work	Odds Ratio*	95%CI
<b>Sex</b>	Male	31.7%	1	-
	Female	7.9%	0.45	0.25-0.86
<b>Work type</b>	Employee	10.9%	1	-
	Self-employed	40.3%	3.69	1.91-7.11
	Other	23.1%	1.81	0.44-7.51
<b>Chemotherapy</b>	Yes	5.8%	1	-
	No	28.8%	3.91	1.95-7.83

\* odds ratios mutually adjusted

Figure 2: Work status at 12-months post-diagnosis



## Conclusions

- There was a relatively high level of work continuation post-diagnosis, but overall the proportions working at 6-months and 12-months post-diagnosis were relatively low compared to studies in other countries. The strong associations between cancer site and sex and workforce participation may reflect the fact that surgery is a less common for prostate than other cancers, and/or difference in gender roles and attitudes towards work. While the associations between being self-employed and work participation may be a consequence of the lack of automatic entitlement to benefits, they probably also reflect commitment and personal investment by self-employed people in their work.
- Further analyses will explore job and organisational factors (e.g. size of organisation, organisational commitment, task control), roles of employers and roles of healthcare professionals in influencing workforce participation at 6 and 12-months.
- Findings such as these could help: (1) health professionals to advise patients appropriately; (2) patients to make treatment decisions and plan for time away from work; and (3) inform developments of interventions/strategies to support and encourage cancer patients to return to work.

