‘Fit for List?’
Optimising the Health Status of Patients with Suspected Cancer in Primary Care
- Is it Feasible?

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Cardiff University
Cardiff and Vale University Health Board

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Population of Wales

In Wales, our population is more aged, has poorer general health and increased deprivation than England

20%	Smoke	20%	High BP
40%	Alcohol +	13%	Respiratory disease
34 %	No exercise	12%	Mental health
58%	Overweight	9%	Heart disease
22%	Obese	7%	Diabetic

Source: Welsh Health Survey 2015

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National Audit of Cancer Diagnosis in Primary Care RCGP 2011

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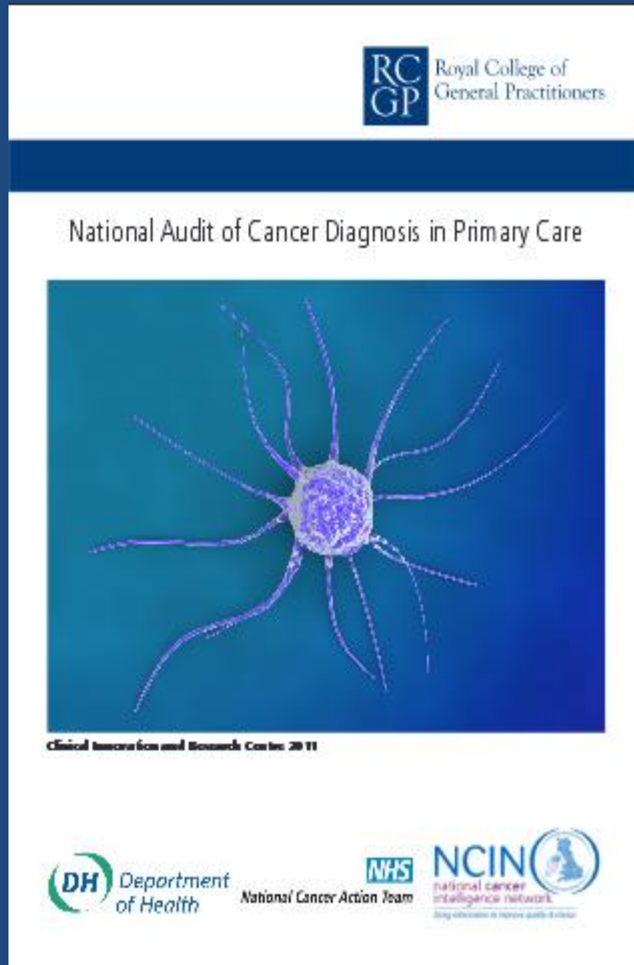

1. USC patients presenting with suspected symptoms of cancer in Primary Care present with other co-morbidities .

2. Fatigue, anaemia, weight loss, breathlessness, nausea and vomiting are common

3. Failure to correct these may mean that treatment outcomes are not optimal

Impact on Cancer Outcomes

Socioeconomic status, health literacy and age are associated with significant disparities in cancer-related outcome

Modifiable

- Smoking and Alcohol negative impact
- Obesity
- Co morbidity
- Anaemia
- Poor Nutrition

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Cancellations and Delays to Treatment

Surgery In Wales

- Each year circa 70K operations cancelled
- 10%-20% for medical or ‘fitness’ reasons
- Cancellations for medical reasons 7K each year
- No less than 25 patients per health board each week

Source: FOI Plaid Cymru

Chemotherapy

- 25 % of patients delayed for medical reasons

Wasserman, Boulos, Hopman, Booth, Goodwin, Biagi. 2015. American Society of Clinical Oncology Journal of Oncological Practice 2015

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What can we learn from Sport?

'Marginal Gains'

You would prepare
for this…..

………so why not prepare
for cancer treatments?

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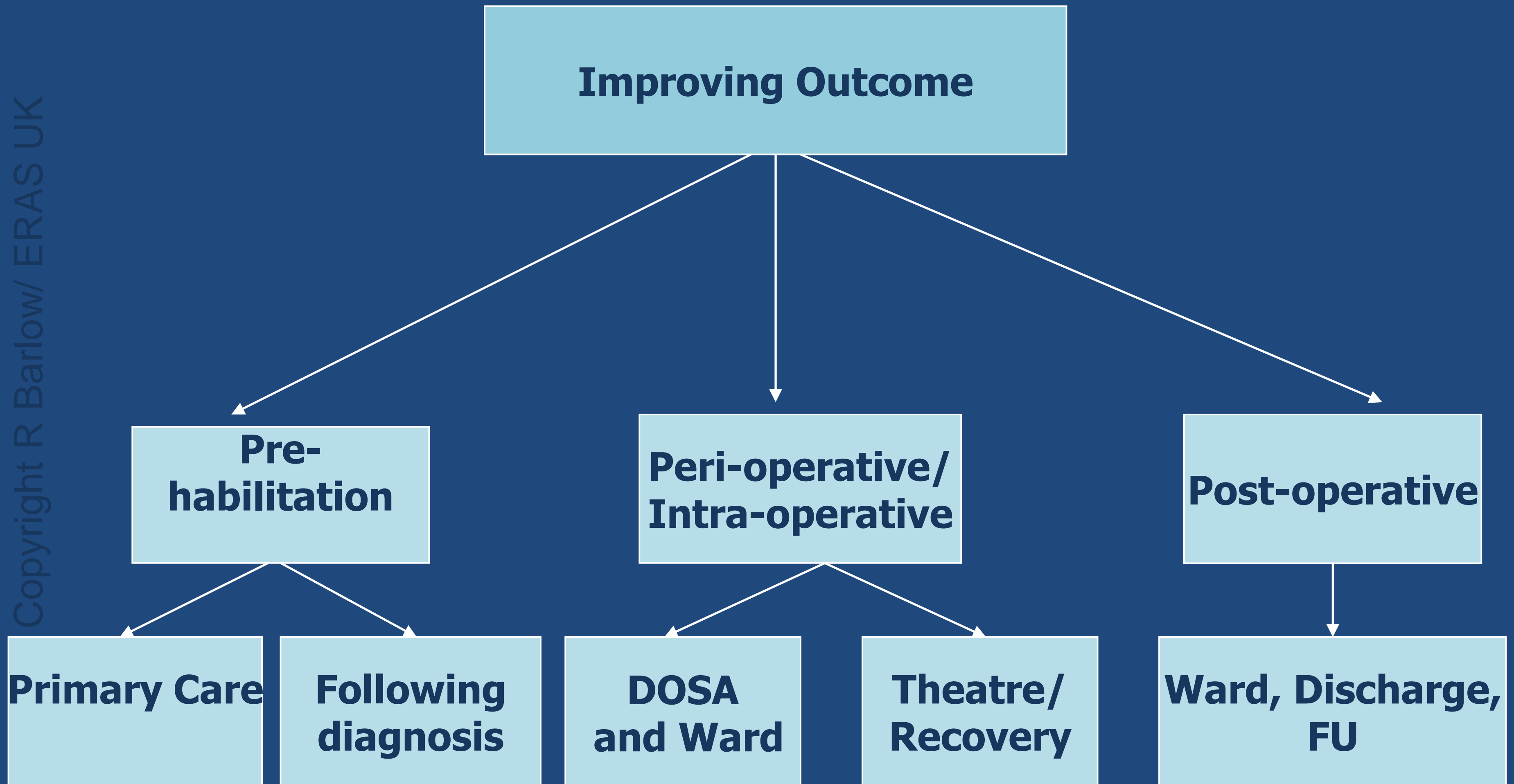
Enhanced Recovery



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Cancer prehabilitation is defined as:

“ A process on the cancer continuum of care that occurs between the ***time of cancer diagnosis and the beginning of acute treatment*** *and includes physical, nutritional and psychological assessments that establish a baseline functional*
level, identify impairments, and provide interventions that promote physical and psychological health to reduce the incidence
and/or severity of future impairments”

Silver JK, Baima J, Mayer RS. Impairment-driven cancer rehabilitation: an essential component of quality care and survivorship. CA Cancer J Clin 2013;63:295-317

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Prehabilitation – How long?

More research needed as it remains unknown as to how long you need to optimise and change health and fitness status

Levett D, Edwards, M Grocott ,M Mythen, M. 2016 in press

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Can this happen in Primary Care when the patient first enters the health care system?

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FIT FOR LIST?

FUNDED BY WALES SCHOOL OF PRIMARY CARE

Can the Feasibility and Appropriateness of a Primary Care Optimisation Bundle be demonstrated in Patients undergoing Treatments for Cancer?

Data collection started Jan 2015

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Aim

To develop and pilot a Fit for List, Optimisation Care Bundle that will detect potential risk factors in Primary Care, enable subsequent timely intervention and result in improved preparation of patients, who may undergo surgical or oncological intervention.

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Methods

Study Design

This is mixed-methods feasibility study.

Study Population

All patients who presented to their GP within one of the recruited primary care practices were eligible to enter into this study.

All patients must be referred by their GP to secondary care using the Urgent Suspected Cancer (USC) pathway.

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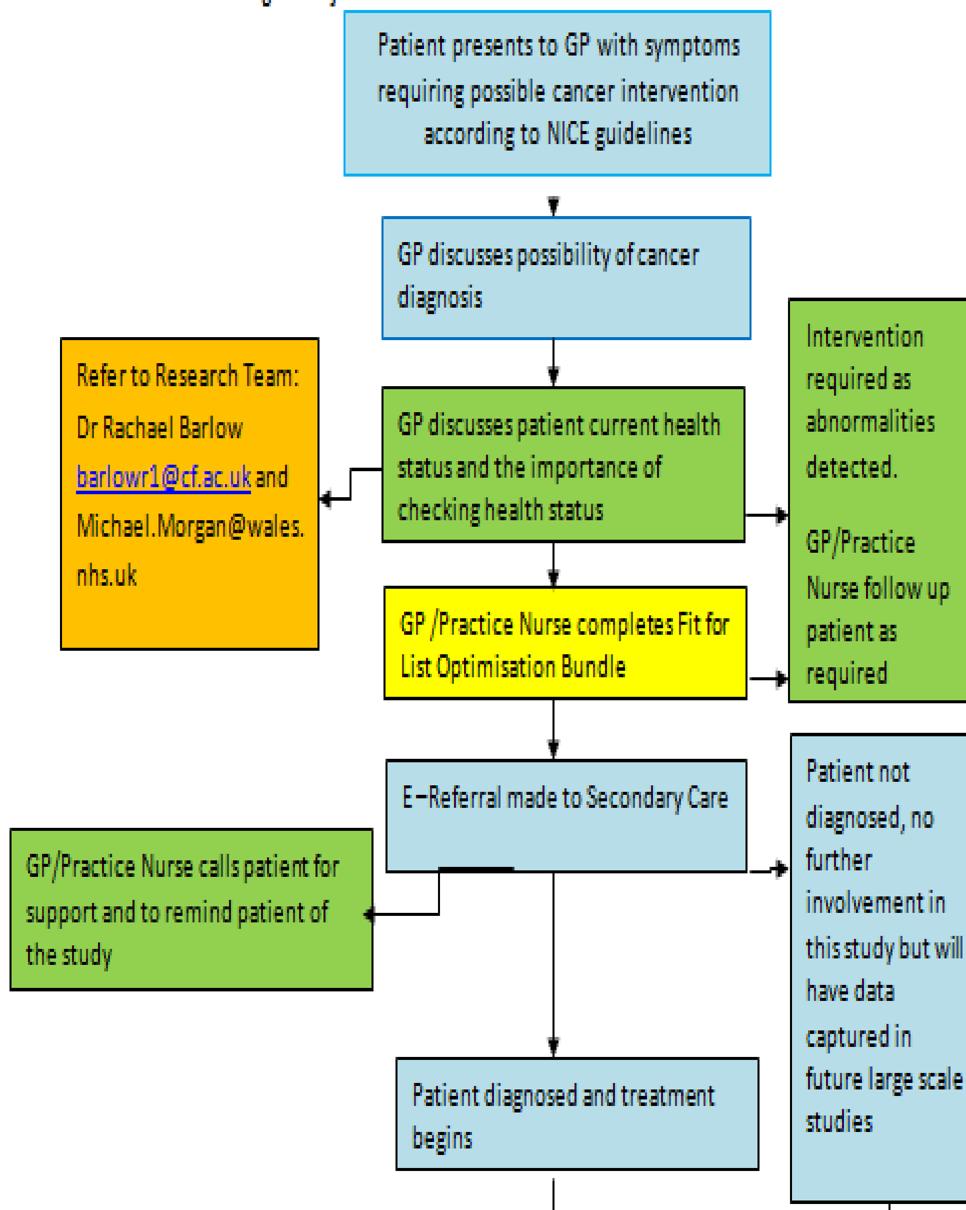

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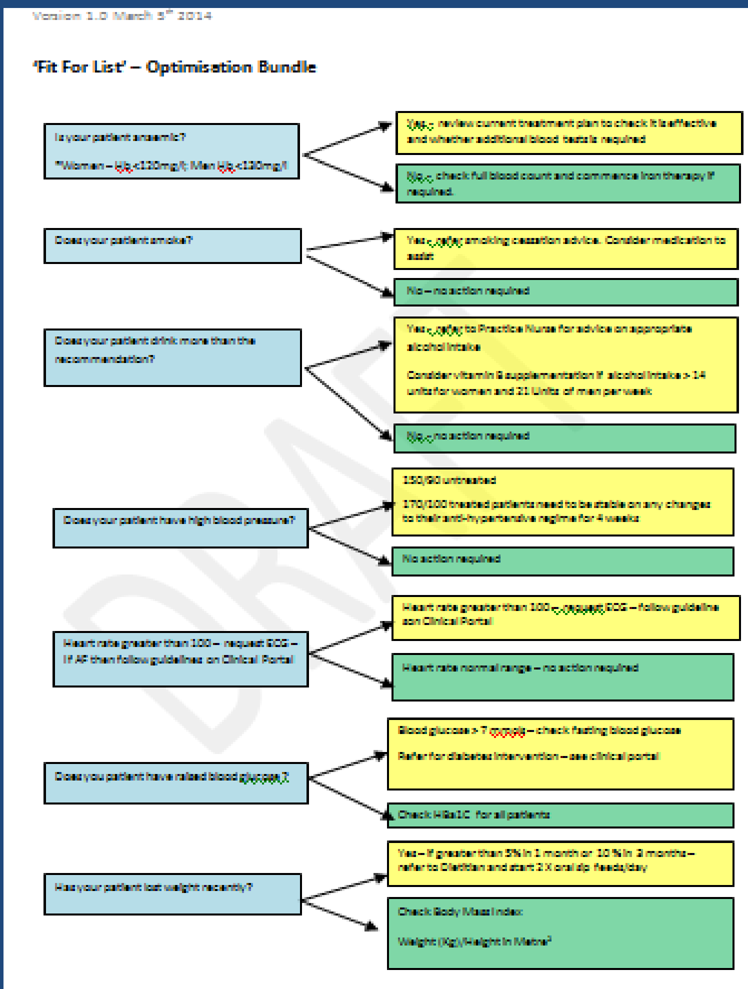
Version 1.0 March 5th 2014

'Fit For List' – Optimisation Bundle

Is your patient anaemic?
*Women – Hb <120mg/l; Men Hb <130mg/l
Yes – review current treatment plan to check it is effective and whether additional blood tests is required
No – check full blood count and commence iron therapy if required.

Does your patient smoke?
Yes – refer smoking cessation advice. Consider medication to assist
No – no action required

Does your patient drink more than the recommendation?
Yes – refer to Practice Nurse for advice on appropriate alcohol intake
Consider vitamin B supplementation if alcohol intake > 14 units for women and 21 Units of men per week
No – no action required

Does your patient have high blood pressure?
150/90 untreated
170/100 treated patients need to be stable on any changes to their anti-hypertensive regime for 4 weeks
No action required

Heart rate greater than 100 – request ECG – If AF then follow guidelines on Clinical Portal
Heart rate greater than 100 – request ECG – follow guideline son Clinical Portal
Heart rate normal range – no action required

Does you patient have raised blood glucose ?
Blood glucose > 7 mmol/l – check fasting blood glucose
Refer for diabetes intervention – see clinical portal
Check HBa1C for all patients

Has your patient lost weight recently?
Yes – if greater than 5% in 1 month or 10 % in 3 months – refer to Dietitian and start 2 X oral sip feeds/day
Check Body Mass Index
Weight (Kg)/Height in Metre²

The Bundle Components

1. Review and optimisation of existing co morbidities (register)
2. Anaemia?
3. Smoking?
4. Alcohol?
5. High Blood pressure?
6. AF?
7. Raised blood glucose?/ HBa1C
8. Nutrition?
9. Exercise?

Template for GPs

Beth Test 12/12/1956 999 999 9999 — Fit for List - Study Pilot

Fit for List - Study Pilot

To develop and pilot a 'Fit for List', Optimisation Care Bundle that will detect potential risk factors in Primary Care, enable subsequent timely intervention and result in improved preparation of patients, who may undergo surgical or oncological intervention.

GP Identification Code - W97286

Cancer Diagnosis?

Due to varying diagnosis of Cancer, please code directly through Vision. The below will display all neoplasm codes entered on the patients no

No data recorded.

Recruitment Status - Fit for List Study

23/06/2014 Invitation to participate in research study Dr J Black

[Invite pt to take part in study (free text "Fit for List")]

23/06/2014 Consent given to participate in research study Dr J Black

[Patient Consents (free text "Fit for List")]

23/06/2014 Declined invitation to participate in research study Dr J Black

[Declined study (free text "Fit for List")]

23/06/2014 Withdrawn from research study Dr J Black

[Withdrawn from study (free text "Fit for List")]

Cancer PIL

20/06/2014 Patient given advice NOS Advice Dr J Black
23/06/2014 Patient given advice NOS Advice Dr J Black

[Ca PIL given - freetext which leaflet]

[Link to Cancer leaflets on Patient.co.uk]

Employment Status

23/06/2014 Occupation Retired Dr J Black
23/06/2014 Occupation Occupations Dr J Black
23/06/2014 Occupation Student Dr J Black
No data recorded.

[Employed (paid or voluntary)] [Unemployed] [Carer] [Retired] [Student]

Lifestyle Advice/Intervention

Smoking - Last 3 statuses

23/06/2014 Smoker Smoking reduced Dr J Black
23/06/2014 Smoker Referral to NHS stop smoking service Dr J Black
23/06/2014 Smoker Refusal to give smoking status Dr J Black

[Smoking Status]

Beth Test 12/12/1956 999 999 9999 — Fit for List - Study Pilot

- Due to the sheer amount of different codes, please check the patients notes.

- Type 'pain' into the top left and click the search magnifying glass.

Referred/seen pain clinic

No data recorded.

Psychological Problems

16/10/2007 [X]Mental and behavioural disorders due to use of alcohol Dr J Black
10/01/2007 Tension headache mild 1/7 Dr A C Rothwell
08/11/2006 [X]Arteriosclerotic dementia Dr A C Rothwell

Gastrointestinal

24/11/2011 Gastrointestinal haemorrhage Dr J Black
16/09/2011 Coeliac disease Dr J Black
17/08/2000 Gastric ulcer - (GU) Dr A C Rothwell

Weight Loss/Nutrition Risk Score

Obesity

- Obesity, check HbA1c if BMI >30

BMI

14/08/2013 Weight: 85.729 kgs BMI: 26.3 O/E - weight Mrs Adele Careless
12/02/2013 Weight: 64 kgs BMI: 24.2 O/E - weight Mrs Adele Careless
07/02/2013 Weight: 56 kgs BMI: 21.6 O/E - weight Dr J Black
04/02/2013 Weight: 65 kgs BMI: 23.5 O/E - weight Mrs Adele Careless
31/03/2014 Weight: 63.503 kgs BMI: 24 O/E - weight Mrs Molly Lewis
31/03/2014 Height: 1.626 metres O/E - height Mrs Molly Lewis

[Weight] [Height]

Nutrition Risk (EQ5D)

- scan the completed questionnaire to the patients notes.

[Record results of EQ5D (free text "EQ5D" and score)]

23/06/2014 Health assessment - EQ5D, 80 Dr J Black

[EQ5D - Link to printable questionnaire]

Blood tests/Anaemia

Last 3 Renal Function (GFR) readings

30/06/2007 GFR calculated abbreviated MDRD = 65 mL/min Dr J Black
07/07/2006 GFR calculated abbreviated MDRD = 29 mL/min Low Dr S M Rowe
16/01/2008 GFR calculated abbreviated MDRD = 61 mL/min Dr J Black

[Blood test request - comment which bloods]

Last 3 U+E readings

No data recorded.

[Blood test request - comment which bloods]

23/06/2014 Declines to state current alcohol consumption Dr J Black
23/06/2014 Current drinker Declines to state current alcohol consumption Dr J Black

[Refusal to give alcohol consumption]

No data recorded.
25/06/2009 Health ed. - alcohol Health ed. - alcohol Health ed. - alcohol Dr J Black
No data recorded.

[Alcohol - Cessation]

23/06/2014 Refer for Referral to community alcohol team Action: 14/07/2014 Text Dr J Black
23/06/2014 Refer for Referral to community alcohol team Action: 14/07/2014 Text Dr J Black

[Referral to comm alcohol team]

23/06/2014 Referral to community alcohol team declined Dr J Black

[Referral to comm alcohol team declined]

Exercise - Last 3 statuses

- Record exercise levels - 1) no exercise, 2) at least 30 mins, 3) 60 mins, 4) 90 mins or 5) more than 120 mins per week.

19/06/2013 Lifestyle advice regarding exercise Dr J Black
18/06/2013 GPPAQ physical activity index: moderately active Moderately active
Job type: Sedentary
Exercise: None
Cycling: Between 1 hour and 3 hours
Walking: Less than 1 hour
Housework: None
Gardening: 3 hours or more
Walking pace: Slow Mr James Morgan
23/06/2014 Health ed. - exercise Dr J Black

[Activity levels per week (30min increments)]

23/06/2014 Health ed. - exercise Dr J Black

[Exercise - Cessation]

23/06/2014 Refer for Referral to exercise on referral programme Action: 14/07/2014 Text Dr J Black

[Refer Exercise programme]

Co-morbidities - Identify/Control

Hypertension /BP reading

Register

Essential hypertension Placed on register: 19/10/2000

[diagnose Hypertension]

Last 3 BP readings

19/06/2013 15:24:00 BP 165 / 90 taken Sitting Cuff: Standard recall due: O/E - blood pressure reading Mrs Claire Harris
07/02/2013 14:33:00 BP 100 / 60 taken Sitting Cuff: Standard recall due: O/E - blood pressure reading Dr J Black
07/02/2014 15:34:00 BP 120 / 80 taken Sitting Cuff: Standard recall due: O/E - blood pressure reading Mr James Morgan

[BP]

Education and training of GPs and Practice Nurses

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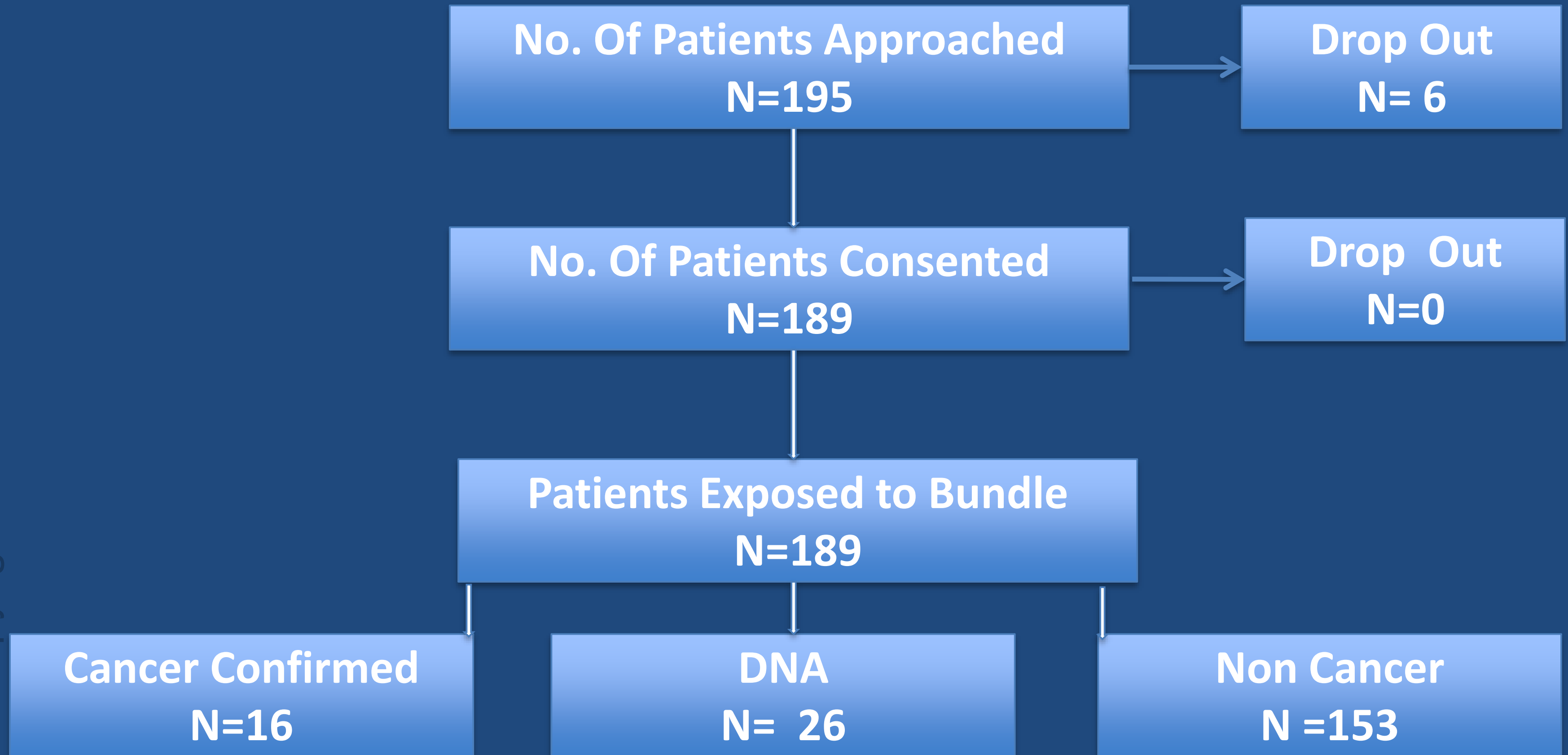
Results



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Patient details

	N	%
Total Recruited	189	
Confirmed Cancer	16	(8)
Non Cancers	153	(79)
Did Not Attend	26	(13)
Age	60 (21-91)	
Gender M:F N(%)	65 (34):124 (66)	

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Uptake of Bundle

Number of Patients who exposed to Bundle

N =189

Number of Patients who required Optimisation

N =84 (44%)

Cancer Patients

Number of Patients who required Optimisation

10 (63%)

Non Cancer Patients

Number of Patients who required Optimisation

74 (43%)

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Reasons for Uptake of Bundle

Intervention	N 189 N (%)
Alcohol advice	14 (7.5)
Smoking cessation	55 (29)
Diabetes review	46 (24)
Hypertension review	91 (48)
Anaemia review	19 (10)
Nutrition review/referral	30 (16)
Exercise advice	115 (61)

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Types of Suspected Cancers

	Non Cancer N (%)	Cancer N (%)
Lung	7 (4)	2 (13)
Breast	20 (11)	3 (19)
Head and Neck/ENT	14 (8)	1 (6)
Prostate	3 (2)	2 (13)
GI	98 (55)	3 (19)
Other	31 (17)	5 (30)

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Co-morbidity at Presentation to Primary Care

	Cancer Patients N=16 N (%)	Non Cancer Patients N=153 N (%)
Cardiovascular Disease	2 (12)	69 (45)
Respiratory disease	4 (25)	44 (29)
Stroke	0 (0)	4 (3)
Renal	0 (0)	15 (10)
Thyroid	0 (0)	14 (9)
Chronic Pain	1 (6)	59 (39)
Psychiatric	3 (18)	84 (55)
GI	2 (12)	84 (55)
Other	7 (42)	115 (75)

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Hypertension

	Cancer Patients N (%)	Non Cancer Patients N (%)
History of Hypertension	7 (44)	80 (52)
History of Hypertension well controlled BP<150/90	5 (71)	59 (74)
Uncontrolled Hypertension >150/90	2 (29)	21 (26)
Diagnosed at consultation started on medication	0	4

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Diabetes and Hyperglycaemia

	Cancer Patients 9 /16 patients 56% poor glycaemic control	Non Cancer Patients N=153
Known Diabetic	6 (38)	20(13)
Known Diabetic well controlled – Normal HBa1C	2 (33)	11 (55)
Known Diabetic – Poor control – Raised HBa1C	4 (66)*	9 (45)
Non Diabetic	10 (62)	133 (87)
Raised HBa1C	5 (31)*	14 (9)

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Anaemia

	Cancer Patients N (%)	Non Cancer Patients N (%)
	6/16 patients 28% poor iron status	
History of Anaemia	3(19)	29 (15)
On medication	0	23 (79)
Not on medication	3	6 (21)
Newly detected Anaemia	3 (18)	16 (11)
Started on Iron Therapy	3 (100)	16 (100)

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Smokers vs Non Smokers

	Cancer Patients N=16 N (%)	Non Cancer Patients N=153 N (%)
Current Smoker	6 (38)	49 (32)
Ex Smoker	6 (28)	55 (36)
Non Smoker	4 (25)	67 (44)
Current Smoker Referred for Advice	3/6	37/49 50% patches/GP 50% smoking cessation
Declined advice	3 (0)	13 (8.5)
Current Smoker Not Referred for Advice	3/6 (50) * 20+ Cigarettes	18 (37)

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Alcohol vs No Alcohol

	Cancer Patients N=16 N (%)	Non Cancer Patients N=153 N (%)
No alcohol	4 (25)	45 (30)
Alcohol 1-7 units	4 (25)	63 (41)
Alcohol 8-14 units	2 (12)	25 (16)
Alcohol 15 -21 units	3 (19)	7 (5)
Alcohol 21+ units	3 (19) 1*	11 (7) 7*

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Exercise

	Cancer Patients N=16 N (%)	Non Cancer Patients N=153 N (%)
No exercise	6 (50)	39 (25)
>30 mins	5 (31)	60 (39)
>60 mins	1 (6)	19 (19)
>90 mins	0 (0)	3 (2)
>120 mins	0 (0)	25 (16)
Not recorded	3 (18)	7 (5)

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Nutrition

	Cancer Patients N=16 N (%)	Non Cancer Patients N=153 N (%)
Low BMI	2 (13)	11 (8)
Normal BMI	4 (25)	39 (25)
Overweight	5 (31)	48 (31)
Obese	5 (31)	56 (37)
% weight loss nil	7 (44)	130 (85)
% weight loss > 5%	6 (38)	14 (9)
% weight loss > 10%	3 (19)	6 (4)
% weight loss>20%	0 (0)	1 (<1)

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Feedback from Primary Care

1. What did you like about the concepts behind Fit for List research study?

"Very sensible. So often they (patients) get to a pre op assessment and stall due to poor BP etc. and then are referred back to us! OR are a higher anaesthetic risk than they need be OR they recovery is not optimised." (Helen Jones, Barry)

2. Do you think it benefits your patients and why if so?

"Yes I believe so -Patients benefit as we can give them advice re optimising their health whether or not urgent surgery needed. Often they are very receptive at this vulnerable time." (Helen Jones, Barry)

3. *"This is something that should be routinely done for all patients." (Dr Crouch, Barry)*

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Summary

Pre treatment optimisation in primary care is feasible

- 44% of the patients recruited needed some form of optimisation
- Smoking, exercise, hypertension and diabetes main reasons
- Anaemia detected and treated in 12% of patients
- Nutrition – weight loss in 56% cancer pts and 14% non cancer pts
- High incidence of overweight or obese
- The majority of the pts were not exercising enough

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Limitations

- Small scale feasibility study
- Designed to be proof of concept
- Compliance not addressed
- Clinical outcomes not addressed
- GP incentivised to take part in study

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Conclusions

1. GPs and Practice Nurses have a major role to play in pre- cancer treatment optimisation
2. It is feasible and practical to manage optimisation in primary care.

Next Steps

A large scale study is being developed to undertake a step wedge cluster randomised controlled trial across Wales and centres in England.

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Acknowledgements

- All patients who took part in the study
- Radyr Health Centre, Cardiff
- Llandaff North Health Centre, Cardiff
- Whitchurch Surgery, Cardiff
- Llyncellyn Surgery, Cardiff
- Ely Bridge Health Centre, Cardiff
- Clifton Street Surgery, Cardiff
- Llanrumney Health Centre, Cardiff
- Llanedeyrn Health Centre, Cardiff
- Rumney Health Centre, Cardiff
- Practice of Health, Barry
- Waterfront Health Centre, Barry

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Samuel H. Golter

"There is no profit in curing the body, if in the process, we destroy the soul."

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City of Hope