



Validation of SPICT in a geriatric population

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I. Pilot study 2015-2017

- Aim

The SPICT™ is used to help identify people whose health is deteriorating. Assess them for unmet supportive and palliative care needs. Plan care.



-Validation of SPICT in a geriatric patient population admitted to the acute geriatric ward

-Importance of prognostication in the acute hospital setting

I. Pilot study 2015-2017

- Research questions

- What is the prognostic value of SPICT regarding one-year mortality in a geriatric population?
- What are the best cut-off values of SPICT regarding one-year mortality predictions in a geriatric population?
- Is there an association between TLDs assigned by geriatricians and SPICT?
(TLD = treatment limitation decision)

I. Pilot study 2015-2017

- Methods

- Retrospective, single-center study at University Hospital, Ghent
- n=435, admitted to the acute geriatric ward January - June 2014
- Data collection starting June 2015:
 - SPICT version 2015
 - Demographics
 - TLD at discharge
 - One-year mortality

The SPICT™ is a guide to identifying people at risk of deteriorating health and dying. Assess these people for unmet supportive and palliative care needs.

Look for two or more general indicators of deteriorating health.

- Performance status is poor or deteriorating (the person is in bed or a chair for 50% or more of the day); reversibility is limited.
- Dependent on others for most care needs due to physical and/or mental health problems.
- Two or more unplanned hospital admissions in the past 6 months.
- Significant weight loss (5-10%) over the past 3-6 months, and/ or a low body mass index.
- Persistent, troublesome symptoms despite optimal treatment of underlying condition(s).
- Patient asks for supportive and palliative care, or treatment withdrawal.

Look for any clinical indicators of one or more advanced conditions

Cancer

Functional ability deteriorating due to progressive metastatic cancer.

Too frail for oncology treatment or treatment is for symptom control.

Dementia/ frailty

Unable to dress, walk or eat without help.

Eating and drinking less; swallowing difficulties.

Urinary and faecal incontinence.

No longer able to communicate using verbal language; little social interaction.

Fractured femur; multiple falls.

Recurrent febrile episodes or infections; aspiration pneumonia.

Neurological disease

Progressive deterioration in physical and/or cognitive function despite optimal therapy.

Speech problems with increasing difficulty communicating and/ or progressive swallowing difficulties.

Recurrent aspiration pneumonia; breathless or respiratory failure.

Heart/ vascular disease

NYHA Class III/IV heart failure, or extensive, untreatable coronary artery disease with:

- breathlessness or chest pain at rest or on minimal exertion.

Severe, inoperable peripheral vascular disease.

Respiratory disease

Severe chronic lung disease with:

- breathlessness at rest or on minimal exertion between exacerbations.

Needs long term oxygen therapy.

Has needed ventilation for respiratory failure or ventilation is contraindicated.

Kidney disease

Stage 4 or 5 chronic kidney disease (eGFR < 30ml/min) with deteriorating health.

Kidney failure complicating other life limiting conditions or treatments.

Stopping dialysis.

Liver disease

Advanced cirrhosis with one or more complications in past year:

- diuretic resistant ascites
- hepatic encephalopathy
- hepatorenal syndrome
- bacterial peritonitis
- recurrent variceal bleeds

Liver transplant is contraindicated.

Review supportive and palliative care and care planning

- Review current treatment and medication so the patient receives optimal care.
- Consider referral for specialist assessment if symptoms or needs are complex and difficult to manage.
- Agree current and future care goals, and a care plan with the patient and family.
- Plan ahead if the patient is at risk of loss of capacity.
- Record, communicate and coordinate the care plan.

Please register on the SPICT website (www.spict.org.uk) for information and updates.

SPICT™, April 2015

6 general questions

21 clinical questions

Positive screen:

≥2 general indicators AND

≥1 clinical indicators present

I. Pilot study 2015-2017

- Results

= SPICT seems to be a valuable tool for identifying geriatric patients with poor prognosis, possibly in need of treatment adaptation



1. Significant association with one-year mortality

Characteristics	Total group n=435	SPICT +ve group n=238	SPICT -ve group n=197	<i>p</i> value
One-year mortality	132 (32.2%)	111 (48.7%)	21 (11.5%)	<0.001

I. Pilot study 2015-2017

2. April 2015 version: solid and balanced combination of sensitivity and specificity in predicting one-year mortality

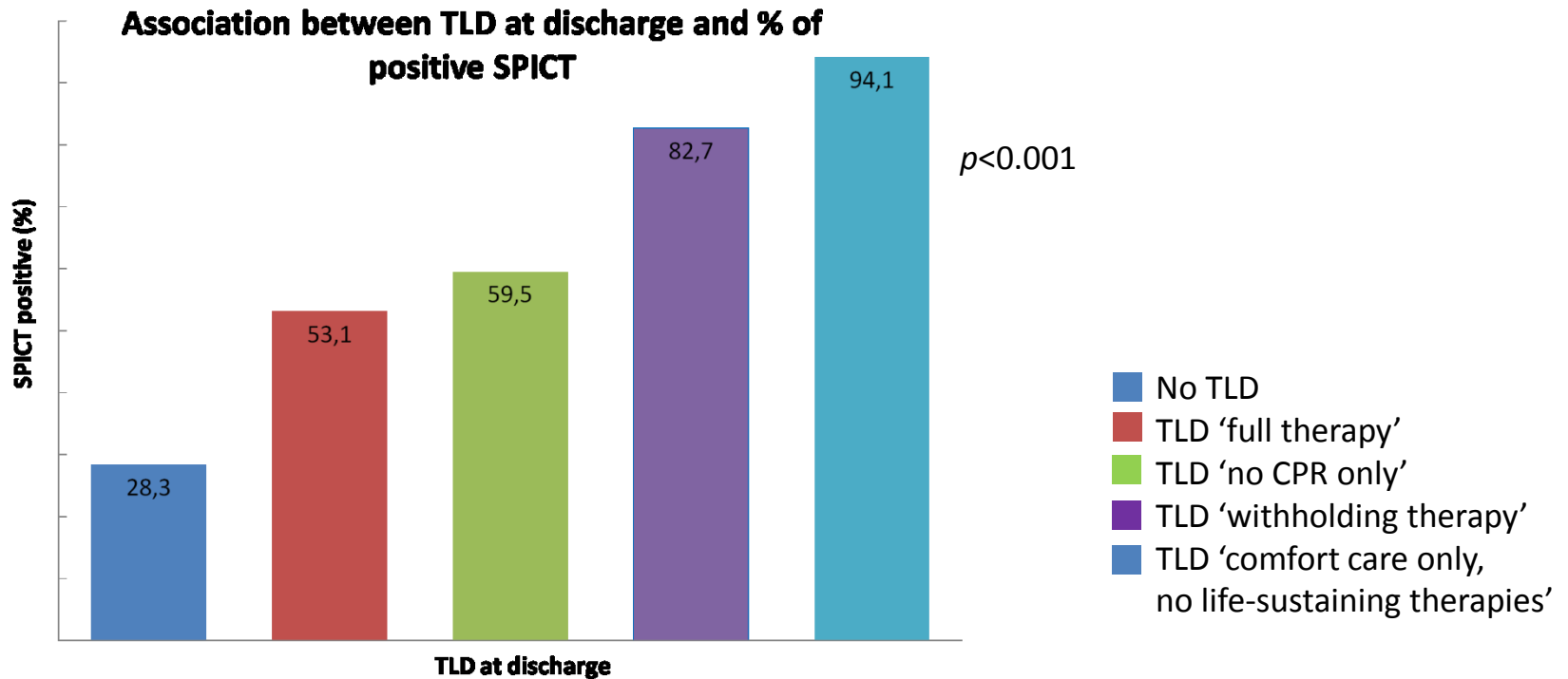
Cut-off values for SPICt-outcome	Sensitivity	Specificity
Cut-off values 2+1 (=April 2015 version)	0.841	0.579
Cut-off values 1+1 (=April 2016 version)	0.932	0.245



- Comparable with the sensitivity and specificity of the Multidimensional Prognostic Index (MPI) and the Study of Osteoporotic Fractures (SOF)
- Advantages of SPICt:
 - ✓ restricted amount of questions
 - ✓ displayed on 1 single page
 - ✓ proven feasibility and convenience

I. Pilot study 2015-2017

3. Significant association with TLDs assigned by geriatricians



I. Pilot study 2015-2017

- Conclusion

SPICT seems to be a valuable tool for identifying geriatric patients with poor prognosis, possibly in need of treatment adaptation

- Limitations

- Unicentric
- Retrospective
- G-ward only

II. Prospective study 2017-2020

- Multi-centric

- 4 participating hospitals in Belgium, each with:

- Acute G-ward: n=60

- Non G-ward (cardiology): n=80

- Hospitalised patients ≥ 75 years

- Prospective

- At admission: IC, 1st part of SPICT (blinded)

- At discharge: 2nd part of SPICT, demographics, TLD

- After 1 year: QOL, survival

II. Prospective study 2017-2020

- Research questions

- Is SPICT an accurate tool to identify the older person admitted to the hospital with poor prospects of full recovery?
- What are the best cut-off values of SPICT in predicting one-year mortality in an older patient population?
- Can SPICT help improve TLD decision making? Are there any differences between G-wards and non G-wards?

II. Prospective study 2017-2020

- Time frame

- January 2018 - October 2018: data collection
- January 2019 - October 2019: one-year outcome
- Beginning of 2020: first results

- Contact

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- Pilot study

De Bock R, Van Den Noortgate N, Piers R. Validation of the Supportive and Palliative Care Indicators Tool in a Geriatric Population. J Palliat Med. 2017 Aug 9.

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