

APPENDIX

Simple Segmentation Tool (SST) V1
 Duke-NUS HSSR Health Services Optimization Lab

22 June 2016

Name of patient: _____ Sex: _____ Age: _____

Evaluator designation (circle): Doctor/ Nurse/ Others (Please indicate PGY) _____ Date: _____

Global impression of patient (Circle (O))	Complicating factors	Level (Circle (O))		
I Healthy	A. Functional assessment, ADL/IADL 0 = no deficit 1 = moderate deficit (1 ADL/IADL) 2 = high deficit (2 or more ADL/IADL)	0	1	2
II Acutely ill but curable	B. Social support in case of need 0 = high support (adequate) 1 = moderate support (any) 2 = low support (none)	0	1	2
III Chronic condition(s), asymptomatic	C. Hospital admissions in last 6 months 0 = none 1 = 1 to 2 2 = 3 or more	0	1	2
IV Chronic condition(s), stable but moderately/seriously symptomatic	D. Disruptive behavioral issues 0 = none 1 = 1 or more, not significantly affecting care 2 = 1 or more, significantly affecting care	0	1	2
V Long course of decline	E. Polypharmacy 0 = fewer than 5 prescription medications 1 = 5 to 8 prescription medications 2 = 9 or more prescription medications	0	1	2
VI Limited reserve and serious exacerbation	F. Organization of care 0 = 1 main provider covering and coordinating for all health issues 1 = no main service provider or multiple non-coordinated providers 2 = patient experiences significant confusion about advice from multiple providers or has no provider at all	0	1	2
VII Short period of decline before dying	G. Activation in own care 0 = ready, understands and interested in treatment; active cooperation and participative 1 = unsure but willing to cooperate, no major compliance issues 2 = major disconnect, unaware/ no insight, may be defiant with major compliance issues	0	1	2
	H. Skilled nursing type task needs 0 = none 1 = moderate (1 task) 2 = high (2 or more tasks)	0	1	2

No complexity – no need for new integrated health and social needs plan (beyond current provision)	←
Moderate complexity – consider new integrated health and social needs evaluation; implement as appropriate	←
High complexity – new integrated health and social needs plan needed; urgent implementation	←

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Guidelines:

Circle the category most likely to determine health needs over the next months to years for the most severe active condition. Also, circle category II if patient currently has a non-minor acute condition.

Global impression	Definition	Descriptive examples
I. Healthy	No more than minimal symptomatic conditions and no asymptomatic conditions that increase risk.	Acute URTI, minor injuries, uncomplicated UTI.
II. Acutely ill but curable	Isolated moderate to major acute condition that requires treatment over a short period (days to months). When assigning Category II, also assign the individual to another category most likely to determine their health service needs in the medium to long-term (months to years).	Hip fracture, joint replacement, pneumonia, DVT, brief psychotic disorder, acute stress disorder). <u>Minor</u> acute conditions (e.g., URTI, minor injuries, uncomplicated UTI) should <u>not</u> be included here.
III. Chronic conditions, asymptomatic	Chronic conditions (not curable once acquired or has persisted >3 months) that are asymptomatic, but notable for increasing preventable risk.	Vascular risk factors such as asymptomatic/uncomplicated diabetes, hypertension, hyperlipidemia; CCF, IHD, CRF, COPD/asthma, depression, bipolar disorder; early asymptomatic visual problems such as glaucoma or AMD; if symptoms that interfere with/restrict normal function are present (at time of assessment), then assign to Category IV.
IV. Chronic conditions, stable but moderately/seriously symptomatic	Chronic conditions that are relatively stable, but are associated with symptoms that interfere with/restrict usual function or would generally be sufficient to trigger care seeking (e.g., pain or fatigue).	Stroke, Parkinson's disease, orthogeriatric conditions (e.g., hip fracture, amputation, or joint replacement with residual symptoms, arthritis), stable symptomatic chronic conditions (e.g., stable angina, COPD, diabetic neuropathy), symptomatic psychiatric disorders (e.g., depression, schizophrenia, bipolar disorder), severe visual loss.
V. Long course of decline	Long (months to years) dwindling course of loss of reserve in multiple organ systems; typically elderly.	A "pure" category V individual would not have a dominant/symptomatic condition and might only manifest with one or more geriatric syndromes (e.g., recurrent falls, incontinence, pressure ulcers, frailty, cognitive impairment). May present concurrently with acute illness (category II).
VI. Limited reserve and serious exacerbation	With a dominant condition associated with frequent exacerbations (3 or more in prior 6 months for the condition, includes episode at time of assessment).	A "pure" category VI individual has recurrent symptoms and frequent complications associated with one dominant chronic condition (e.g., diabetes with recurrent infection/metabolic extremes; frequent flares of COPD, angina, heart failure, CRF that is difficult to control) and is associated with recurrent A&E visits and/or admissions.
VII. Short period of decline before dying	Severe life limiting conditions for palliative management. (Life expectancy hours to months).	Cancer, end-organ failure (e.g., late CCF, IHD, liver failure, bedridden with severe dementia.)
Complicating factors		Level and legends
A. Functional assessment (Definition: Requiring caregiver assistance to perform basic or instrumental ADL.)	Basic ADLs: <u>Bathing</u> <u>Dressing</u> <u>Toileting</u> <u>Transferring</u> <u>Continence</u> <u>Feeding</u> Instrumental ADLs: <u>Ability to use telephone</u> <u>Shopping</u> <u>Food preparation</u> <u>Housekeeping</u> <u>Laundry</u> <u>Use of transportation</u> <u>Responsibility for own medication</u> <u>Ability to handle finances</u>	
B. Social support (Definition: Family or friends who provide support through decision making, companionship, basic healthcare services.)	Social support refers to aid with decision making, companionship and basic healthcare services should the need arise. If support is available in all 3 domains, this is high.	
D. Disruptive behavioural issues (Definition: Disruptive behavioural issues requiring support for caregiver.)	Behavioral issues are disruptive if they significantly affect care; which is defined as typically requiring time and attention from people in patient's environment, or inducing distress. <u>Substance abuse</u> <u>Self-harm</u> <u>Confusion/forgetfulness</u> <u>Depression</u> <u>Dissociative problems</u> <u>Abusiveness</u> <u>Anxiety</u> <u>Night-time wandering</u> <u>Physical aggression towards others</u>	
E. Polypharmacy (Definition: Large number of prescription medications.)	Prescription medications are defined as medications for which patient has a written prescription. They <u>exclude</u> alternative medications such as traditional Chinese medicine and other herbal supplements.	
F. Organization of care (Definition: Degree of co-ordination amongst providers and absence of multiple doctor medical advice confusion.)	Coordination is defined by documented communication between providers directly (e.g., via letter or email) or indirectly (e.g., via navigator or other dedicated 3 rd party maintaining written records who could be family or other caregiver). Organization is assumed to be functionally uncoordinated if the patient experiences significant confusion.	
G. Activation in own care (Definition: Knowledge, skill, and confidence for managing one's health and healthcare as well as cooperation with treatment.)	Major compliance/cooperation issues are ones which have led to adverse medical outcomes.	
H. Skilled nursing type task needs (Definition: Healthcare tasks which require specific skills training to perform.)	<u>Wound dressing</u> <u>Injections</u> <u>Change of feeding tube</u> <u>Urinary catheter</u> <u>Advanced self-management training for patient/caregiver</u> <u>Monitoring of blood pressure & blood sugar levels</u>	