

## Supplement file.1. Initial Competency framework

Questionnaire Items	Good	Not so good	Not helpful
<b>I. PEOPLE</b>			
<b>Quality</b>			
1. Length of diagnostic interval			
2. First therapeutic intervention wait time			
3. After hours cancer surgery			
4. Access to Clinical trial participation			
5. Sufficient multidisciplinary staff, expert subspecialists			
6. Correct diagnosis			
7. Time taken for the production of pathology reports			
8. Protocol-adapted therapy			
9. Drug availability			
10. Interdisciplinary team meetings, Tumor boards			
11. Hospital registry			
12. Five-year overall/ Event free survival reporting			
13. Treatment-related mortality documentation			
14. Supportive/nutritional care guidelines			
15. Fertility preservation for male/female			
16. Maximize outpatient care			
17. Reduce End-of-life care days spent in acute care			
18. Standardization for accreditation			
<b>Safety</b>			
19. Infection control team			
20. Reduce the Number of Patient Transfers and Handoffs			
21. Reduce ICU Admissions due to Neutropenic sepsis			
22. Eradicate Potential/ Actual medication errors			
23. Reduce Radiation exposure during follow-up care			
24. Reduce clinical trial protocol violation			
25. Utilize SCAMPs (Standardized clinical assessment and management plans)			
26. Responsiveness to Parent/guardian perspective and experience			
<b>Psycho-social support</b>			
27. Listen to what patients are saying.			
28. Managing Procedural Pain, Nausea, and Neuropsychological Effects			
29. Tragedy Control			
30. School re-integration for children receiving cancer treatment			
31. Applying a Developmental Perspective			
32. Survivors reintegration into the community			
33. Increase employee job satisfaction			
34. Proactively engage society about what constitutes valuable care			
35. Promoting Prevention System 2016 Quality Index			
36. Care for the carers			
37. Strategies to stop incivility			
38. Provision of treatment regardless of ability to pay			
<b>Education</b>			
39. A formal program in an understandable language for Patient/ family			
40. Informed consents			
41. Staff Professional development through life-long learning			
42. Critical mass: training and retention of professionals			
43. Implementation of innovative teaching tools, clinical guidelines, treatment protocols, and continuing education programs			
44. Educate general Pediatricians regarding hematology/oncology issues			
45. Participate in initiatives that support subspecialty maintenance of certification.			
<b>II. PLANET</b>			
Resources stewardship			

46. International Collaborative clinical trials			
47. Population-based Cancer registry for etiologic research			
48. Development and Validation cancer control plans, national protocols			
49. Use principles of health informatics to Manage Information technologies			
50. Documentation of diagnosis, extent of disease, and treatment plan			
51. Documentation of psychological counseling			
52. Parking and Garages			
53. Places to Eat			
54. Family Resource Center			
55. Office of Patient Experience			
<b>Innovation</b>			
56. <i>Decide how and when should invest in new technology.</i>			
57. Encourage Tele-Health, remote care			
58. Utilize digital Roadmap Builder			
59. Big data			
60. Implement Population risk stratification			
61. Gene Therapy			
62. Cancer immunotherapy			
63. MIBG Therapy			
64. Cancer Genetic Risk assessment			
65. Precision Medicine			
<b>Evaluation &amp; Monitring</b>			
66. Implementing the Cancer Care index CCI (a metric to document performance improvement across a broad range of domains, in a given time frame, regardless of cancer type)			
67. Measure of Processes of Care (MPOC)			
68. Monitoring of compliance			
69. Root cause analysis team			
70. Scorecards utilization			
71. Annual independent audit			
72. Articulate a concrete set of Sustainable development key performance indicators on which all parties must report			
73. Public reporting			
74. Mentor Resource usage : Energy – Materials – Water – Land			
75. Implement Environmental Management System			
76. Lower Noise Levels			
<b>III. PROFIT (Resource Allocation)</b>			
77. Keep operations in line with budgetary and strategic outcomes			
78. Create Transparency for Drug Regimens, and Procurement policies			
79. Transform cancer care from a high-cost to a high-value enterprise			
80. Utilize facility units for paid services for adults, non-cancer patients (Laboratory – Radiology – Meeting rooms – Blood banks – Research – Physiotherapy)			
81. Promote more effective mixed payment structure			
82. Reduce Out-Of-Pocket Healthcare Costs			
83. Early adoption strategy of palliative care			
84. Partnerships and mergers and acquisitions			
85. Involve Health Insurance			
86. Strategic, Sustainable purchasing			
87. Include influential members of society, professionals, and parents/ relatives of patients in Fundraising activities			
88. Target the High income Countries (HICs) to provide initial funding to implement and maintain the program			
89. Increase pay and improve nonmonetary incentives			
90. Perverse incentives for overuse of medical resources, industry monopoly power over drug pricing, overly aggressive end-of-life care, and a fragmented health care system that lacks patient-centeredness			
91. Incentives for care coordination			
<b>LEADERSHIP</b>			

92. Physician Leaders should be involved from the beginning in planning and implementation			
93. Developing a mission statement which has to be inclusive for the Triple Bottom Lines (TBLs); People, Profit, and Planet			
94. Integrate People; i.e patients, medical students and residents, fellows, leaders in medical education, other health care professionals, specialty bodies, governing institutions and partner organizations, and international collaborators; all in one theme of "Cancer Cure" as a Purpose			
95. Create the Leadership Team			
96. Advocacy voice on both internal and external levels.			
97. Legal and regulatory compliance			
98. Act as Clinical directorates			
99. Improve global coordination, membership or affiliation with the Pediatric Oncology international Groups			
100. Regional/district-based health service delivery networks			
101. Alliance with other Medical disciplines			
102. Shuttle sheet (POGO ROADMAP)			
103. Eligible survivors enrolled in After Care, Survivors care plan			
104. Case coordinator			
105. Referral and counter-referral systems			
106. Keep Staff close to Patients			
107. Engage civic organizations in planning and services			
108. Intersectoral partnerships, merging of health sector and social services			
109. Maintain effective collaboration between clinicians and executives			

## Supplement file.2 Competency framework

<b>I. Safety</b>	
1	Eradication of potential/ actual medication errors
2	Infection control team
3	Reduction of the number of patient transfers and handoffs
4	Reduction of ICU admissions due to neutropenic sepsis
5	Reduction of clinical trial protocol violation
6	Utilization of SCAMPs (Standardized clinical assessment and management plans)
7	Responsiveness to parent/guardian perspective and experience
<b>II. Quality</b>	
8	Maximization of outpatient care
9	Length of diagnostic interval
10	First therapeutic intervention wait time
11	Sufficient multidisciplinary staff, tumor boards
12	Protocol-adapted therapy
13	Annual protocol review & update
14	Drug availability
15	Hospital registry
16	Five-year overall/Event free survival reporting
17	Treatment-related mortality documentation
18	Supportive/nutritional care guidelines
19	Fertility preservation for male/female
20	Reduction of end-of-life care days spent in acute care
<b>III. Psycho-Social</b>	
21	Listening to what patients are saying
22	Management of procedural pain, nausea, and neuropsychological effects
23	Proactive tragedy control
24	School re-integration for children receiving cancer treatment
25	Increase of employee job satisfaction
26	Provision of treatment regardless of ability to pay
<b>IV. Education</b>	
27	A formal program in an understandable language for patient/ family
28	Informed consents
29	Staff professional development through life-long learning
30	Critical mass: training and retention of professionals.
31	Implementation of innovative teaching tools, clinical guidelines,
32	Education of general pediatricians regarding hematology/oncology issues
33	Participation in initiatives that support subspecialty maintenance of certification.
<b>V. Resource Allocation</b>	
34	Early adoption strategy of palliative care.
35	Creation of transparency for drug regimens, and procurement policies.

36	Transformation of cancer care from a high-cost to a high-value enterprise.
37	Utilization of facility units for paid services for adults, non-cancer patients
38	Partnerships and mergers and acquisitions.
39	Involvement of health insurance
40	Strategic and sustainable purchasing
41	Inclusion of influential members of society,
42	Targeting the high income countries (HICs)
43	Incentives for care coordination, and non-monetary incentives
44	Perverse incentives
<b>Innovation</b>	
45	Encouragement of tele-Health, remote care
46	Utilization of digital roadmap builder.
47	Big data
48	Gene therapy
49	Cancer immunotherapy.
50	MIBG therapy.
51	Cancer genetic risk assessment
52	Precision medicine
<b>Resources Stewardship</b>	
53	International collaborative clinical trials
54	Population-based cancer registry for etiologic research
55	Development and validation of cancer control plans, national protocols
56	Documentation of psychological counseling.
57	Office of patient experience
<b>Evaluation &amp; Monitoring</b>	
58	Implementation of the cancer care index CCI
59	Monitoring of compliance
60	Root cause analysis team
61	Scorecards utilization
62	Implementation of environmental management system.
63	Articulation of a concrete set of sustainable development key performance
64	Public reporting
<b>Leadership</b>	
65	Physician leaders involvement from the beginning in planning and implementation.
66	Developing a mission statement which has to be inclusive
67	Legal & regulatory compliance
68	Creation of the leadership team.
69	Defining the interrelation with pharmaceutical companies
70	Improvement of global coordination, membership, or affiliation
71	Regional/district-based health service delivery networks
72	Referral and counter-referral systems.
73	Intersectoral partnerships, merging the health sector with social services

Supplement file. 3. Round II items

<b>PEOPLE</b>	<b>Safety</b>	
	1	Eradication of potential/actual medication errors
	2	Infection control team
	3	Reduction of ICU Admissions due to neutropenic sepsis
	<b>Quality</b>	
	4	Maximization of outpatient care
	5	First therapeutic intervention wait time
	6	Sufficient multidisciplinary staff, tumor boards
	7	Protocol-adapted therapy
	8	Drug availability
	9	Hospital registry
	10	Treatment-related mortality documentation
	11	Supportive/nutritional care guidelines
	<b>Psycho-Social</b>	
	12	Listening to what patients are saying
	13	Management of procedural pain, nausea, and neuropsychological effects
	14	School re-integration for children receiving cancer treatment
	15	Provision of treatment regardless of ability to pay
	<b>Education</b>	
	16	A formal program in an understandable language for patient/family
	17	Informed consents
	18	Staff professional development through life-long learning
	19	Implementation of innovative teaching tools, clinical guidelines
<b>Profit</b>	<b>Innovation</b>	
	20	Encouragement of Tele-health, remote care
	21	Big data
	22	Cancer immunotherapy
	23	Precision medicine
	<b>Resource Allocation</b>	
	24	Early adoption strategy of palliative care
	25	Creation of transparency for drug regimens, and procurement policies
	26	Transformation of cancer care from a high-cost to a high-value enterprise
	27	Inclusion of influential members of society
<b>Planet</b>	<b>Resource Stewardship</b>	
	28	International collaborative clinical trials
	29	Population-based cancer registry for etiologic research
	30	Development and validation of cancer control plans, national protocols
	<b>Evaluation &amp; Monitoring</b>	
	31	Root cause analysis team
	32	Scorecards utilization
	33	Implementation of environmental management system

	<b>LEADERSHIP</b>	
	34	Physician leaders involvement from the beginning in planning and implementation
	35	Developing a mission statement which has to be inclusive
	36	Legal & regulatory compliance
	37	Improvement of global coordination, membership or affiliation