

**PCSI 2012 Casemix Winter School - “Design and Implementation of Activity Based Funding”, Curriculum Outline – Jan 13<sup>th</sup> version**

Monday	Tuesday	Wednesday	Thursday	Friday
<p>Student check-in (8:30 to 9:00)</p> <p>School Opening (09:00 – 09:30)</p> <ul style="list-style-type: none"> <li>• Course logistics and overview of week</li> <li>• Introductions - faculty and students</li> </ul>	<p>Hands-on Data Analysis I (09:00 – 12:30)</p> <p>Identification and removal of anomalous cost data</p> <ul style="list-style-type: none"> <li>• Assessment of DRGs                             <ul style="list-style-type: none"> <li>○ Cost homogeneity</li> <li>○ Clinical homogeneity</li> <li>○ Stability</li> <li>○ Transparency and simplicity</li> </ul> </li> <li>• Cost weight calculation                             <ul style="list-style-type: none"> <li>○ Setting trim points</li> <li>○ Calculating cost weight and outlier payment weight</li> </ul> </li> </ul>	<p>ABF Design and Implementation II (09:00 - 12:30)</p> <ul style="list-style-type: none"> <li>• Expenditure control and demand management                             <ul style="list-style-type: none"> <li>○ Two-part tariffs; volume caps</li> </ul> </li> <li>• Paying for specialized care, teaching, research, innovation and new technologies, appropriate levels of care</li> <li>• Private versus public provision</li> <li>• Paying for quality</li> <li>• Speed of implementation and transition funding</li> <li>• Tracking of volumes and expenditures</li> <li>• Price negotiations with providers</li> <li>• Update cycle: payment weights, base rate, market forces factors</li> <li>• Bundling and unbundling</li> <li>• Resources to build and operate an ABF system</li> <li>• Data, IT infrastructure, expertise, and funding</li> </ul>	<p>Analytical Methods III (09:00 – 12:30)</p> <p>Regression Modeling</p> <ul style="list-style-type: none"> <li>• Linear regression (OLS, WLS)</li> <li>• Logistic regression</li> <li>• Assessment of model assumptions</li> <li>• Transformations</li> <li>• Applications in ABF design and implementation</li> </ul> <p>Population health and risk adjustment</p>	<p>Hands-on Data Analysis II (09:00 – 12:00)</p> <ul style="list-style-type: none"> <li>• Base rate adjustment factors</li> <li>• Inter-facility comparisons of efficiency</li> <li>• Monitoring and evaluation of ABF</li> <li>• Managing a hospital under ABF</li> <li>• Population health and risk adjustment</li> </ul>
<p>Activity Based Funding – Intro &amp; Overview (09:30 – 11:00)</p> <ul style="list-style-type: none"> <li>• Definition and basic mechanics of ABF</li> <li>• Comparison with other funding mechanisms</li> <li>• Financial Incentives</li> <li>• Historical background and evolution</li> <li>• EuroDRG Project</li> </ul>				<p>Ongoing Learning (12:00 – 12:15)</p> <p>Sources of DRG Literature</p>
<p>Casemix Classification Systems (11:00 – 12:30)</p> <ul style="list-style-type: none"> <li>• Design principles</li> <li>• Age and complexity/severity adjustments</li> <li>• Update cycle</li> <li>• Clinician and other stakeholder input</li> <li>• Diagnosis and procedure primary classification systems</li> <li>• Adapting DRG system from another country</li> <li>• Population health and risk adjustment</li> </ul>				<p>School Closing (12:15 – 12:30)</p> <ul style="list-style-type: none"> <li>• Course evaluation</li> <li>• Closing remarks</li> </ul>
<p>Lunch (12:30 – 13:15)</p>	<p>Lunch (12:30 – 13:15)</p>	<p>Lunch (12:30 – 13:15)</p>	<p>Lunch (12:30 – 13:15)</p>	<p>Lunch (12:30 – 13:15)</p>
<p>Analytical Methods I (13:15 –15:30)</p> <ul style="list-style-type: none"> <li>• Introduction to statistical software</li> <li>• Data exploration                             <ul style="list-style-type: none"> <li>○ Descriptive statistics</li> <li>○ Visualization – charts, graphs and plots</li> </ul> </li> <li>• Probability densities                             <ul style="list-style-type: none"> <li>○ Cost</li> <li>○ Length of stay</li> </ul> </li> <li>• Basic mechanics of trimpoint and cost weight calculation</li> <li>• Statistical tests                             <ul style="list-style-type: none"> <li>○ Statistical significance of effects</li> <li>○ Materiality of effects</li> </ul> </li> <li>• Goodness of fit measures</li> <li>• <math>R^2</math>, bias, prediction error, coefficient of variation</li> </ul>	<p>ABF Design and Implementation I (13:15 – 17:00)</p> <ul style="list-style-type: none"> <li>• Setting cost/payment weight                             <ul style="list-style-type: none"> <li>○ Basic mechanics</li> <li>○ Long and short stay trimming</li> <li>○ Outlier policy and payment</li> <li>○ Consideration of hospital effects</li> <li>○ Adopting cost weights from another country</li> <li>○ Alignment with health policy objectives</li> <li>○ Average cost, marginal cost, efficient price</li> <li>○ Using pricing to incent behaviour changes</li> </ul> </li> <li>• Setting base rate</li> <li>• Setting market forces and other adjustment factors</li> <li>• Exclusions: areas of care, small hospitals</li> </ul>	<p>Financial Information &amp; Patient-Level Costing (13:15 – 17:00)</p> <ul style="list-style-type: none"> <li>• Bottom-up costing and top-down costing costing</li> <li>• Charter of accounts and standardization                             <ul style="list-style-type: none"> <li>○ Variations across countries</li> </ul> </li> <li>• Cost buckets</li> <li>• Workload measurement systems</li> <li>• Allocation methods</li> <li>• Common issues and challenges of implementation</li> <li>• Accuracy, representativeness, and completeness</li> <li>• Identifying and handling anomalous cost data</li> <li>• Adapting case-cost data from another country</li> </ul>	<p>Monitoring and Evaluation of ABF (13:15 – 14:30)</p> <ul style="list-style-type: none"> <li>• Potential effects of ABF                             <ul style="list-style-type: none"> <li>○ Changes in case mix, efficiency, cost, length of stay, quality, readmissions</li> <li>○ Changes in medical record documentation</li> <li>○ Coding accuracy, upcoding, and DRG creep</li> <li>○ Quality of care, moral hazard, risk selection, cost shifting</li> <li>○ Strategies for management</li> </ul> </li> <li>• Monitoring of effects                             <ul style="list-style-type: none"> <li>○ Analytical methods and audits</li> <li>○ Inter-facility comparison of performance and identifying efficient hospitals</li> <li>○ Population "fair shares" analysis</li> </ul> </li> </ul>	<p align="center">No classes – school is closed</p>
<p>Analytic Methods II (15:45 – 17:00)</p> <ul style="list-style-type: none"> <li>• Decision tree modeling                             <ul style="list-style-type: none"> <li>○ CART, CHAID algorithms</li> <li>○ Applications in DRG development, refinement, and evaluation</li> </ul> </li> </ul>			<p>Managing a Hospital Under ABF (14:45 – 16:30)</p> <ul style="list-style-type: none"> <li>• Scrutiny of prices and inequities in payment</li> <li>• Patient-level costing</li> <li>• Identifying and managing inefficiencies</li> <li>• Negotiating payment for exception cases</li> </ul>	

**Coffee Breaks at 10:30 and 15:30**