OBJECTIVES: To estimate the 3-year budget impact of phased RF ablation system for patients with CAF-only. The costs are health-care, systematic, drug-refractory paroxysmal or persistent AF (PAF or CAF) patients in the Turkish setting. METHODS: Payer perspective is applied. Only direct costs are considered. Literature research is performed for epidemiologic data. Comparators are identified. Clinical scenarios in the Turkish (2) electric censored 3D-mapping catheter ablation, (3) pulmonary vein balloon cryo-ablation (Medtronic ArcticFront). Device and procedure costs are derived from Medtronic sales data (May 2014-May 2015) for cryo-ablation and AF market data. Two scenarios are run: (1) PAF-only for PAF+CAF population, (2) MASC+MAAC combined with PAF and/or ArcticFront for CAF-only. RESULTS: MASC+MAAC population prediction is derived from several global studies. The included population for catheter ablation is around 5,500 patients annually, the total catheter ablation market size corresponding to one-fourth of it, mainly due to insufficient number of studies. The 3-year budget impact per patient is 270TL, 267TL and 334TL in first and 268TL, 274TL and 334TL in second scenario. CONCLUSIONS: If the limitations in quality-of-life, general health and related indirect costs are considered, the socioeconomic burden of disease would be significantly high. Indirect, long-term savings provided by significant shortening of procedure times with new technology are not included in the analysis, due to payer perspective. Considering these indirect costs and savings, the budget impact of new phased RF ablation system would be more positive.